

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/Caplus  
NEWS 5 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 6 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004  
NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
  
NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 10:33:09 ON 16 APR 2004

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Patel

<4/16/2004>

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:33:32 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7  
DICTIONARY FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

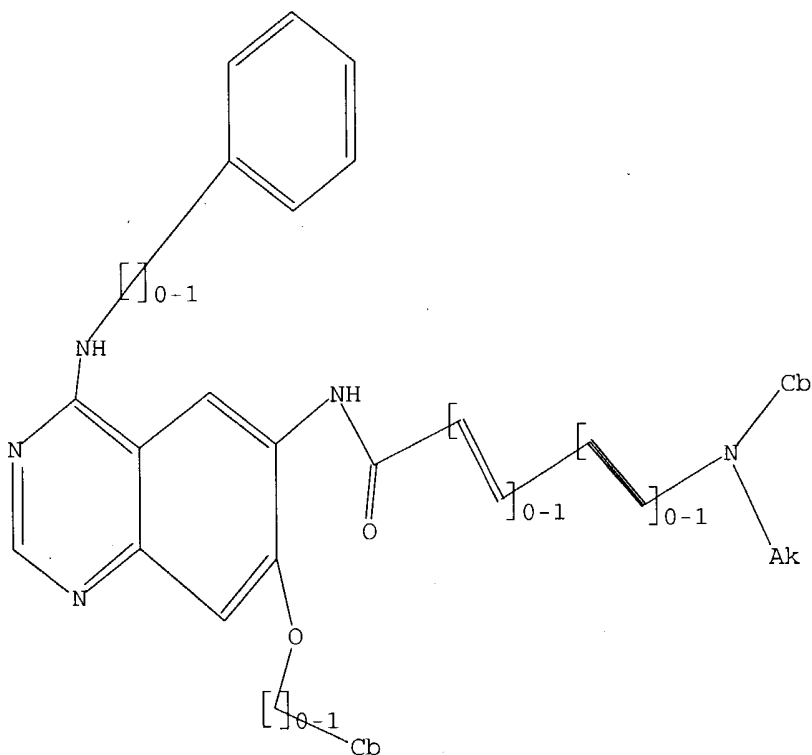
Uploading c:\program files\stnexp\queries\10016280.10

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS FULL

FULL SEARCH INITIATED 10:33:54 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 393 TO ITERATE

100.0% PROCESSED 393 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L2 0 SEA SSS FUL L1

=> FILE MARPAT

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

155.42

155.63

FILE 'MARPAT' ENTERED AT 10:34:04 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 15) (20040409ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6706759 16 MAR 2004  
DE 10335606 11 MAR 2004

Patel

<4/16/2004>

EP 1394228 03 MAR 2004  
JP 2004075668 11 MAR 2004  
WO 2004020602 11 MAR 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> S L1 SSS FULL  
FULL SEARCH INITIATED 10:34:12 FILE 'MARPAT'  
FULL SCREEN SEARCH COMPLETED - 2151 TO ITERATE

100.0% PROCESSED 2151 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.16

L3 0 SEA SSS FUL L1

=> FILE CAOLD		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	109.42	265.05

FILE 'CAOLD' ENTERED AT 10:34:33 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> S L1 SSS FULL  
**REGISTRY INITIATED**  
Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or PHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 10:34:40 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 393 TO ITERATE

100.0% PROCESSED 393 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L4 0 SEA SSS FUL L1

10016280.10

Page 5

L5 0 L4

=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

0.42

421.31

STN INTERNATIONAL LOGOFF AT 10:34:45 ON 16 APR 2004

Welcome to STN International! Enter x:x

LOGINID:sssptal611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/CAPLUS  
NEWS 5 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 6 MAR 03 MEDLINE and LMEADLINE reloaded  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004  
NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
  
NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:21:46 ON 16 APR 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

Patel

<4/16/2004>

FILE 'REGISTRY' ENTERED AT 15:21:51 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 15 APR 2004 HIGHEST RN 675818-37-8  
DICTIONARY FILE UPDATES: 15 APR 2004 HIGHEST RN 675818-37-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

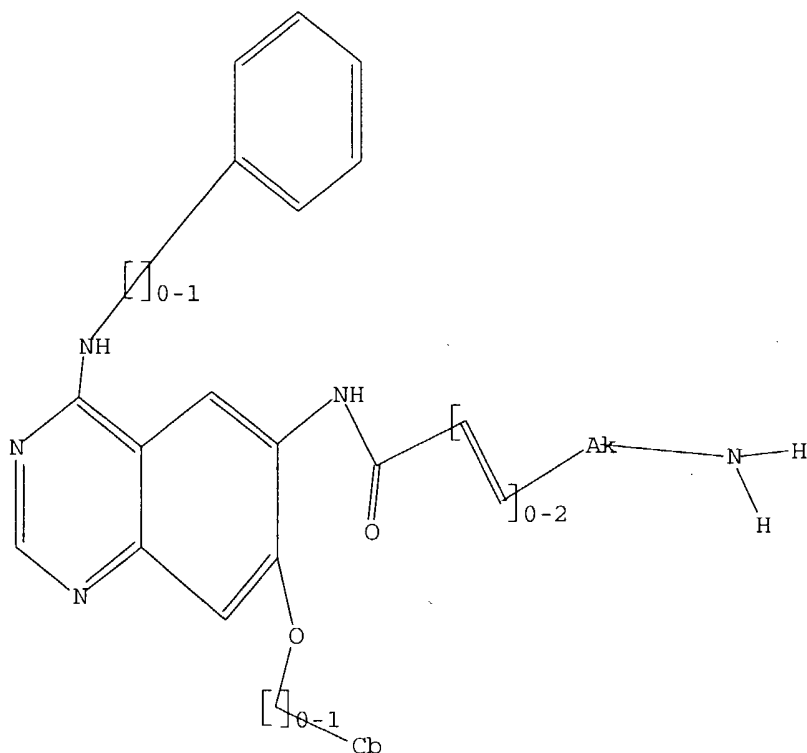
Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading c:\program files\stnexp\queries\10016280.12

L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1

STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 15:22:16 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 395 TO ITERATE

100.0% PROCESSED 395 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'MARPAT' ENTERED AT 15:22:23 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 15) (20040409ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6706759 16 MAR 2004  
DE 10335606 11 MAR 2004  
EP 1394228 03 MAR 2004  
JP 2004075668 11 MAR 2004  
WO 2004020602 11 MAR 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full

FULL SEARCH INITIATED 15:22:30 FILE 'MARPAT'  
FULL SCREEN SEARCH COMPLETED - 2160 TO ITERATE

100.0% PROCESSED 2160 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.14

L3 0 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	109.42	265.05

FILE 'CAOLD' ENTERED AT 15:23:02 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)



This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s ll sss full

**REGISTRY INITIATED**

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 15:23:08 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 395 TO ITERATE

100.0% PROCESSED 395 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L4 0 SEA SSS FUL L1

L5 0 L4

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	421.31

STN INTERNATIONAL LOGOFF AT 15:23:13 ON 16 APR 2004

Welcome to STN International! Enter x:x

LOGINID:sssptal611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/CAPLUS  
NEWS 5 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 6 MAR 03 MEDLINE and LMEADLINE reloaded  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004  
NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
  
NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:25:16 ON 16 APR 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

Patel

<4/16/2004>

FILE 'REGISTRY' ENTERED AT 15:25:26 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 15 APR 2004 HIGHEST RN 675818-37-8  
DICTIONARY FILE UPDATES: 15 APR 2004 HIGHEST RN 675818-37-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

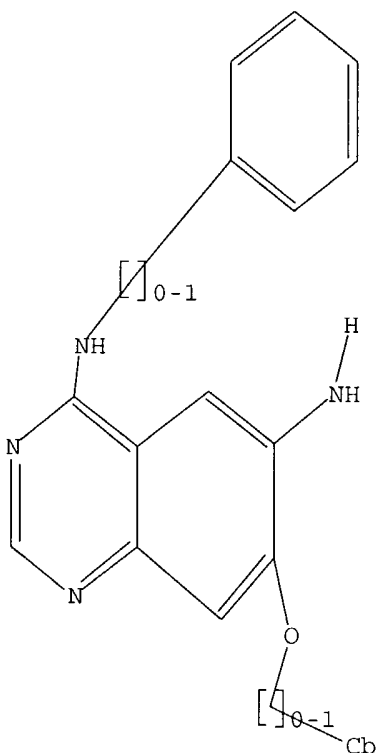
Uploading c:\program files\stnexp\queries\10016280.13

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 15:25:50 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 666 TO ITERATE

100.0% PROCESSED 666 ITERATIONS 12 ANSWERS  
SEARCH TIME: 00.00.01

L2 12 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'MARPAT' ENTERED AT 15:25:56 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 15) (20040409ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6706759 16 MAR 2004  
DE 10335606 11 MAR 2004  
EP 1394228 03 MAR 2004  
JP 2004075668 11 MAR 2004  
WO 2004020602 11 MAR 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full

FULL SEARCH INITIATED 15:26:09 FILE 'MARPAT'  
FULL SCREEN SEARCH COMPLETED - 2220 TO ITERATE

100.0% PROCESSED 2220 ITERATIONS ( 1 INCOMPLETE) 16 ANSWERS  
SEARCH TIME: 00.00.14

L3 16 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	109.42	265.05

FILE 'CAOLD' ENTERED AT 15:26:29 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s ll sss full

**REGISTRY INITIATED**

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 15:26:35 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 666 TO ITERATE

100.0% PROCESSED 666 ITERATIONS 12 ANSWERS  
SEARCH TIME: 00.00.01

L4 12 SEA SSS FUL L1

L5 0 L4

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	421.31

FILE 'CAPLUS' ENTERED AT 15:26:42 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Apr 2004 VOL 140 ISS 17  
FILE LAST UPDATED: 15 Apr 2004 (20040415/ED)

This file contains CAS Registry Numbers for easy and accurate

substance identification.

=> d his

(FILE 'HOME' ENTERED AT 15:25:16 ON 16 APR 2004)

FILE 'REGISTRY' ENTERED AT 15:25:26 ON 16 APR 2004

L1 STRUCTURE UPLOADED

L2 12 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 15:25:56 ON 16 APR 2004

L3 16 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:29 ON 16 APR 2004

S L1

FILE 'REGISTRY' ENTERED AT 15:26:35 ON 16 APR 2004

L4 12 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:36 ON 16 APR 2004

L5 0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:26:42 ON 16 APR 2004

=> s 12

L6 12 L2

=> s 13

L7 16 L3

=> d 16 fbib hitstr abs total

L6 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:41317 CAPLUS

DN 140:99649

TI Pharmaceutical compositions for the treatment of respiratory tract diseases comprising novel anticholinergic agents and inhibitors of EGFR-kinase

IN Pairet, Michel; Meade, Christopher John Montague; Pieper, Michael P.

PA Boehringer Ingelheim Pharma GmbH & Co. Kg, Germany

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004004775	A1	20040115	WO 2003-EP6788	20030626
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				
	PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR,				
	TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,				
	KZ, MD, RU, TJ				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				
	CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,				

NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG

DE 10230751 A1 20040122 DE 2002-10230751A 20020709  
US 2004048887 A1 20040311 DE 2002-10230751 20020709  
US 2003-614382 20030707  
DE 2002-10230751A 20020709  
US 2002-407746PP 20020903

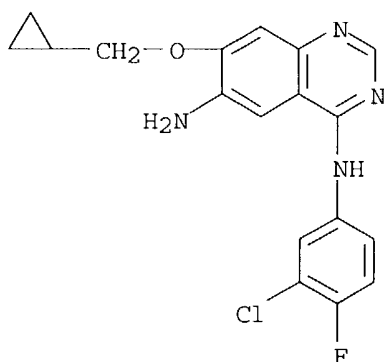
OS MARPAT 140:99649

IT **290304-07-3**

RL: RCT (Reactant); RACT (Reactant or reagent)  
(pharmaceutical compns. for treatment of respiratory tract diseases  
comprising anticholinergic agents and inhibitors of EGFR-kinase)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolininediamine, N4-(3-chloro-4-fluorophenyl)-7-  
(cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



AB The invention relates to novel pharmaceutical compns. comprising novel anticholinergic agents and EGFR-kinase inhibitors, method for production and use thereof in the treatment of respiratory diseases. The synthesis of several EGFR-kinase inhibitors is given. Thus an inhalation capsule contained (microgram/capsule): 2,2-Diphenylpropionic acid scopine ester methobromide 60; EGFR kinase inhibitor 3500; lactose 3440.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:913005 CAPLUS

DN 139:391384

TI Use of inhibitors of EGFR-mediated signal transduction for the treatment of benign prostatic hyperplasia (BPH)/prostatic hypertrophy

IN Singer, Thomas; Colbatzky, Florian; Platz, Stefan

PA Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003094921	A2	20031120	WO 2003-EP4606	20030502
	WO 2003094921	A3	20040318		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG

DE 10221018 A1 20031127 DE 2002-10221018A 20020511  
 US 2003225079 A1 20031204 DE 2002-10221018 20020511  
 US 2003-431699 20030508  
 DE 2002-10221018A 20020511  
 US 2002-389815PP 20020618

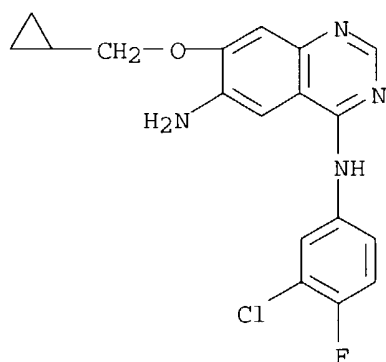
OS MARPAT 139:391384

IT **290304-07-3**

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (EGFR-mediated signal transduction inhibitors for treatment of benign  
 prostatic hyperplasia/prostatic hypertrophy)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-  
 (cyclopropylmethoxy) - (9CI) (CA INDEX NAME)



AB The invention discloses the use of EGF-receptor antagonists for the production of a medicament to prevent and/or treat benign prostatic hyperplasia and/or prostatic hypertrophy, as well as a method for the treatment or prevention of benign prostatic hyperplasia/prostatic hypertrophy involving the administration of an EGF-receptor antagonist, optionally in combination with known compds. for the treatment of benign prostatic hyperplasia/prostatic hypertrophy, and the corresponding pharmaceutical compns. Compds. of the invention include e.g. quinazoline derivs. and monoclonal antibodies. Preparation of  
 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-(N-(2-methoxyethyl)-N-methylamino)-1-oxo-2-buten-1-yl)amino]-7-cyclopropylmethoxyquinazoline is described.

L6 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:855936 CAPLUS

DN 139:350749

TI Preparation of 4-aminoquinazolines as inhibitors of epidermal growth factor receptor (EGF-R)



IN Himmelsbach, Frank; Jung, Birgit; Solca, Flavio  
 PA Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany  
 SO PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003089439	A1	20031030	WO 2003-EP3828	20030414
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10217689	A1	20031113	DE 2002-10217689A	20020419
	US 2004044014	A1	20040304	DE 2002-10217689	20020419
				US 2003-417647	20030417
				DE 2002-10217689A	20020419
				US 2002-387021PP	20020607

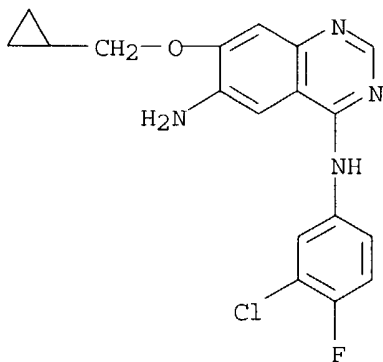
OS MARPAT 139:350749

IT **290304-07-3**

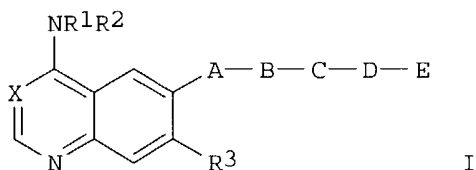
RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of aminoquinazolines as inhibitors of epidermal growth factor receptor (EGF-R))

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy) - (9CI) (CA INDEX NAME)



GI



AB Title compds. [I; R1 = H, alkyl; R2 = Ph, benzyl, 1-phenylethyl in which Ph is substituted; R3 = H, F, Cl, Br, OH, alkoxy, fluorinated OMe, OEt, substituted alkoxy; cycloalkyloxy, tetrahydrofuran-3-yloxy, tetrahydropyran-3-yloxy, tetrahydropyran-4-yloxy, etc.; A = imino, alkylimino, B = CO, SO2; C = (substituted) 1,3-allenylene, 1,1-vinylene, 1,2-vinylene, C.tplbond.CH, etc.; D = (branched) alkylene; E = bridged pyrrolidin-1-yl, piperidin-1-yl, piperazin-1-yl, morpholin-4-yl] tautomers, stereoisomers, mixts. and salts thereof, particularly their physiol. compatible salts with inorg. or organic acids, were prepared Thus, a solution of LiCl in H2O was treated with 4-[(3-chloro-4-fluorophenyl)amino]-6-[2-(diethoxyphosphoryl)acetyl amino]-7-[(S)-(tetrahydrofuran-3-yl)oxy]quinazoline (preparation given) in THF followed by addition of

KOH-pellets

and cooling at -3°. Then, the reaction mixture was dropwise treated with (1S,4S)-(2-oxa-5-azabicyclo[2.2.1]hept-5-yl)acetaldehyde hydrochloride (preparation given) for 5 min at 0° followed by stirring for 10 min at 0° and for 20 min at room temperature to give 60% 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-[(1S,4S)-2-oxa-5-azabicyclo[2.2.1]hept-5-yl]-1-oxo-2-buten-1-yl)amino]-7-[(S)-(tetrahydrofuran-3-yl)oxy]quinazoline. The latter inhibited EGF-receptor kinase with IC50 = 0.5 nM. The invention also relates to the use of these compds. for treating diseases, particularly tumor diseases and benign prostatic hyperplasia (BPH), diseases of the lungs and of the respiratory tract.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:656610 CAPLUS  
DN 139:202486  
TI Inhalants containing anticholinergic agents and EGFR kinase inhibitors  
IN Jung, Birgit; Pairet, Michel; Pieper, Michael P.  
PA Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany  
SO PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068264	A1	20030821	WO 2003-EP1357	20030212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

DE 10206505 A1 20030828  
 US 2003158196 A1 20030821

DE 2002-10206505A 20020216  
 DE 2002-10206505 20020216  
 US 2003-360064 20030207  
 DE 2002-10206505A 20020216  
 US 2002-369213PP 20020401

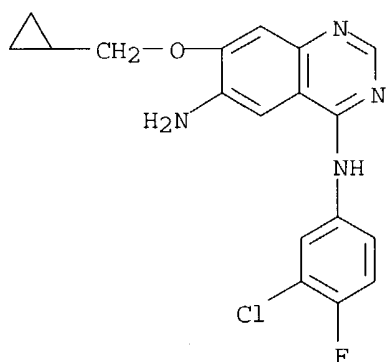
IT **290304-07-3**

RL: RCT (Reactant); RACT (Reactant or reagent)

(inhalants containing anticholinergic agents and EGFR kinase inhibitors)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinodiamine, N4-(3-chloro-4-fluorophenyl)-7-  
 (cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



AB The invention relates to novel medicinal compns. on the basis of anticholinergic agents and EGFR kinase inhibitors, methods for their production and their use for treating respiratory diseases. Thus a series of quinazoline derivs. were synthesized that were EGFR kinase inhibitors. A typical inhalation powder contained (µg/capsule): tiotropium bromide 10.8; EGFR kinase inhibitor 3500; lactose 3489.2.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:607455 CAPLUS

DN 139:159940

TI Use of tyrosine kinase inhibitors for treatment of pulmonary inflammatory conditions

IN Jung, Birgit; Puschner, Hubert

PA Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany

SO Ger. Offen., 24 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10204462	A1	20030807	DE 2002-10204462	20020205
	WO 2003066060	A2	20030814	WO 2003-EP814	20030128
	WO 2003066060	A3	20040115		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

US 2003149062 A1 20030807 DE 2002-10204462A 20020205  
 US 2003-353616 20030129  
 DE 2002-10204462A 20020205

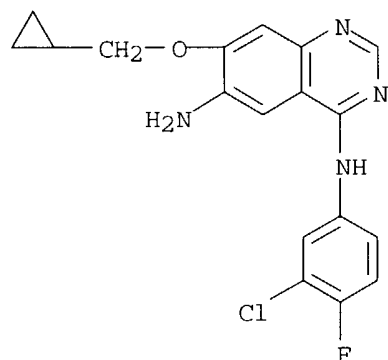
OS MARPAT 139:159940

IT **290304-07-3**

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (tyrosine kinase inhibitors for treatment of pulmonary inflammatory  
 conditions)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-  
 (cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



AB The invention discloses the use of quinazoline derivs. (Markush included), or the compds. (1) 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-dimethylaminocyclohexyl)amino]pyrimido[5,4-d]pyrimidine; (2) 4-[(R)-(1-phenylethyl)amino]-6-(4-hydroxyphenyl)-7H-pyrrolo[2,3-d]pyrimidine; (3) 4-[(3-Chloro-4-(3-fluoro-4-benzyloxy)phenyl)amino]-6-[5-((2-methansulfonylethyl)amino)methyl]-furan-2-yl]quinazoline; or the antibody cetuximab C225, trastuzumab, ABX-EGF, Mab ICR-62 and EGFR antisense, their tautomers, their stereoisomers and their salts, in particular their physiol. compatible salts with inorg. or organic acids or bases, for the production of a medication for prevention or treatment of diseases of the respiratory system or the lung. Preparation of quinazoline compds. is included.

L6 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:487536 CAPLUS

DN 137:63250

TI Quinazoline derivatives as inhibitors of human EFG tyrosine kinase

IN Himmelsbach, Frank; Langkopf, Elke; Blech, Stefan; Jung, Birgit; Baum, Elke; Solca, Flavio

PA Boehringer Ingelheim Pharma Kg, Germany

SO PCT Int. Appl., 64 pp.

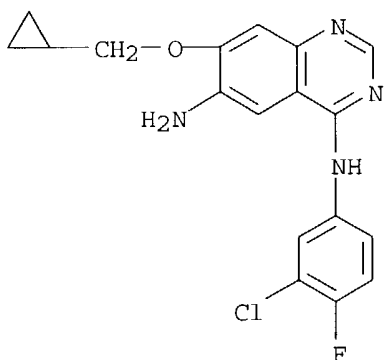
CODEN: PIXXD2

DT Patent

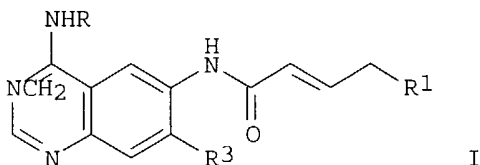
LA German

FAN.CNT 1

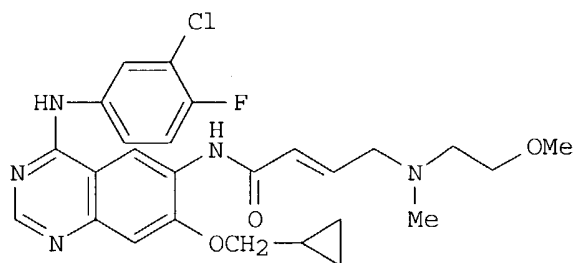
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002050043	A1	20020627	WO 2001-EP14569	20011212
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10063435	A1	20020704	DE 2000-10063435A	20001220
	AU 2002019174	A5	20020701	DE 2000-10063435	20001220
				AU 2002-19174	20011212
				DE 2000-10063435A	20001220
	EP 1345910	A1	20030924	WO 2001-EP14569W	20011212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			EP 2001-271363	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	EE 200300300	A	20031015	EE 2003-300	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	BR 2001016266	A	20040217	BR 2001-16266	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	US 2002173509	A1	20021121	US 2001-23099	20011217
				DE 2000-10063435A	20001220
				US 2000-259201PP	20001228
	NO 2003002726	A	20030616	NO 2003-2726	20030616
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
OS	MARPAT 137:63250				
IT	<b>290304-07-3</b>				
	RL: RCT (Reactant); RACT (Reactant or reagent)				
	(preparation of quinazoline derivs. as inhibitors of human EFG tyrosine kinase)				
RN	290304-07-3 CAPLUS				
CN	4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy)- (9CI) (CA INDEX NAME)				



GI



I



II

AB Quinazoline derivs. I [R = PhCH<sub>2</sub>, PhCHMe, 3,4-Cl(F)C<sub>6</sub>H<sub>3</sub>; R<sub>1</sub> = NMe<sub>2</sub>, NEt<sub>2</sub>, NEtCH<sub>2</sub>CH<sub>2</sub>OMe, N(CH<sub>2</sub>CH<sub>2</sub>OMe)<sub>2</sub>, morpholino; R<sub>2</sub> = Me, Et, CHMe<sub>2</sub>, cyclopropyl, CH<sub>2</sub>CH<sub>2</sub>OMe, 3-tetrahydrofuryl, 2-tetrahydrofurylmethyl, 3-tetrahydrofurylmethyl, 4-tetrahydropyranyl, 4-tetrahydropyranylmethyl; R<sub>3</sub> = cyclopropylmethoxy, cyclobutyloxy, cyclopentyloxy, 3-tetrahydrofuranyloxy, 2-tetrahydrofuranylmethoxy, 3-tetrahydrofuranylmethoxy, 4-tetrahydropyranyloxy, 4-tetrahydropyranylmethoxy] were prepared for use as inhibitors of signal transduction caused by human EFG receptor tyrosine kinase. They are useful in the treatment of tumoral diseases, diseases of the lung and the respiratory tract, the gastrointestinal tract, and the gallbladder and bile ducts. Thus, the quinazoline II was prepared by converting bromocrotonic acid to its chloride, and reaction with 4-[(3-chloro-4-fluorophenyl)amino]-6-amino-7-cyclopropylmethoxyquinazoline, followed by MeNHCH<sub>2</sub>CH<sub>2</sub>OMe. II had an IC<sub>50</sub> against human EFG receptor kinase of 0.7 nM.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:171892 CAPLUS

DN 136:216762

TI Preparation of 4-amino-6-heterocyclylcarbonylaminoquinazolines as epidermal growth factor receptor signal transduction inhibitors

IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Blech, Stefan; Solca, Flavio

PA Boehringer Ingelheim Pharma Kg, Germany

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018376	A1	20020307	WO 2001-EP9536	20010818
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10042062	A1	20020307	DE 2000-10042062A	20000826
	AU 2001095482	A5	20020313	AU 2001-95482	20010818
				DE 2000-10042062A	20000826
	EP 1315720	A1	20030604	WO 2001-EP9536 W	20010818
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		EP 2001-976108	20010818
				DE 2000-10042062A	20000826
	JP 2004507538	T2	20040311	WO 2001-EP9536 W	20010818
				JP 2002-523891	20010818
				DE 2000-10042062A	20000826
	US 2002115675	A1	20020822	WO 2001-EP9536 W	20010818
				US 2001-934631	20010822
				DE 2000-10042062A	20000826
				US 2000-230542PP	20000905

OS MARPAT 136:216762

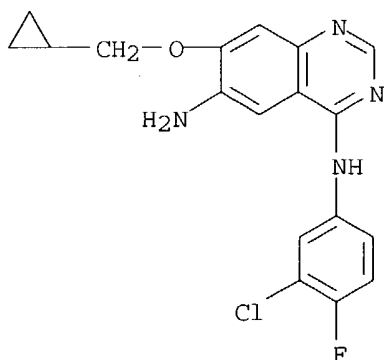
IT **290304-07-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

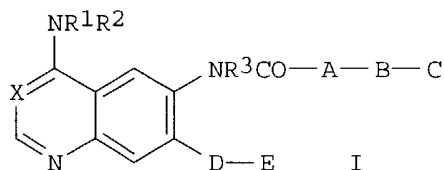
(preparation of (amino)(heterocyclylcarbonylamino)quinazolines as epidermal growth factor receptor signal transduction inhibitors)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy)-(9CI) (CA INDEX NAME)



GI



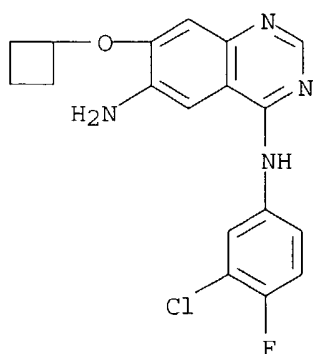
AB Title compds. [I; X = N, (substituted) methynyl; R1 = H, Me; R2 = (substituted) Ph, PhCH2, 1-phenylethyl; R3 = H, Me; A = (substituted) vinyl, ethynyl, 1,3-butadien-1,4-yl; B = (substituted) alkenyl, alkenylcarbonyl, etc.; C = (substituted) 2-oxomorpholin-4-yl, etc; D = oxyalkenyl, O; E = (substituted) amino, alkenylimino, imidazolyl, cycloalkyl; or DE = H, (substituted) alkoxy, etc.], were prepared. Thus, 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-[N-(ethoxycarbonylmethyl)-N-((R)-2-hydroxy-3-methoxypropyl)amino]-1-oxo-2-buten-1-yl)amino]-7-cyclopropylmethoxyquinazoline (preparation given) and MeSO2OH in MeCN were stirred for 4 h under reflux to give 69% 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-[(R)-2-methoxymethyl-6-oxomorpholin-4-yl]-1-oxo-2-buten-1-yl)amino]-7-cyclopropylmethoxyquinazoline. The latter inhibited epidermal growth factor (EGF)-dependent proliferation of F/L-HERc cells with IC50 = 2 nM. The invention relates to the use of the title compds. for treating tumor diseases, and lung and respiratory tract disorders.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

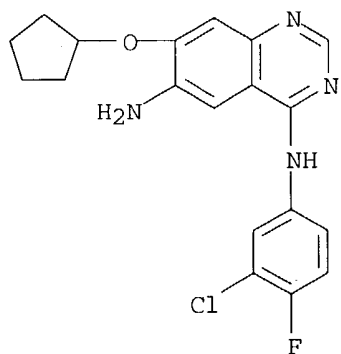
L6 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2002:171889 CAPLUS  
DN 136:232315  
TI Preparation of 4-amino-6-vinylcarbonylaminoquinazolines as epidermal growth factor receptor signal transduction inhibitors  
IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Blech, Stefan; Solca, Flavio  
PA Boehringer Ingelheim Pharma Kg, Germany  
SO PCT Int. Appl., 78 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1



	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018373	A1	20020307	WO 2001-EP9537	20010818
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10042060	A1	20020307	DE 2000-10042060A	20000826
	US 2002077330	A1	20020620	US 2001-929931	20010815
	US 6653305	B2	20031125		
				DE 2000-10042060A	20000826
				US 2000-230389PP	20000906
	AU 2001084021	A5	20020313	AU 2001-84021	20010818
				DE 2000-10042060A	20000826
				WO 2001-EP9537 W	20010818
	EP 1315717	A1	20030604	EP 2001-962953	20010818
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				DE 2000-10042060A	20000826
				WO 2001-EP9537 W	20010818
OS	MARPAT 136:232315				
IT	290303-28-5P 290303-32-1P 290303-43-4P 290304-07-3P				
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(preparation of (amino)(vinylcarbonylamino)quinazolines as epidermal growth factor receptor signal transduction inhibitors)				
RN	290303-28-5 CAPLUS				
CN	4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclobutyloxy)-(9CI) (CA INDEX NAME)				



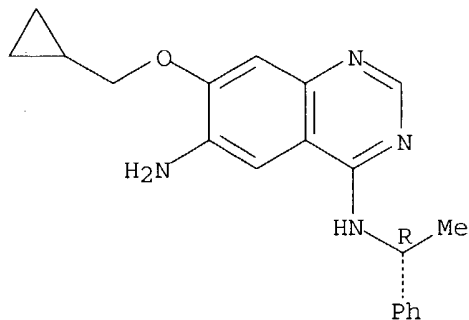
RN 290303-32-1 CAPLUS  
 CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopentyloxy)-(9CI) (CA INDEX NAME)



RN 290303-43-4 CAPLUS

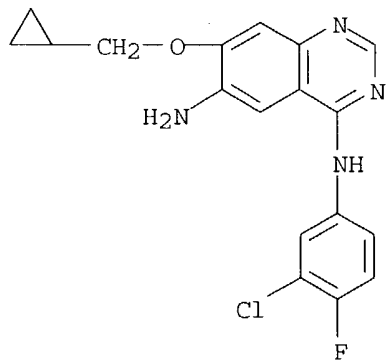
CN 4,6-Quinazolinediamine, 7-(cyclopropylmethoxy)-N4-[(1R)-1-phenylethyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

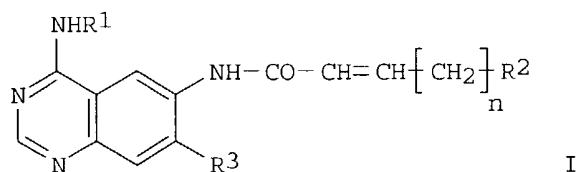


RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



GI



AB Title compds. [I; R1 = PhCH<sub>2</sub>, 1-phenylethyl, (substituted) Ph; R2 = N-[(1,3-dioxolan-2-yl)methyl]methylamino, (substituted) R<sub>4</sub>OCOCH<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH, 2-oxomorpholin-4-yl; R<sub>4</sub> = H, alkyl; R<sub>3</sub> = H, (alkoxy)alkoxy, cycloalkylalkoxy, tetrahydrofuran-3-yloxy, tetrahydropyran-3-yloxy, tetrahydropyran-4-yloxy, tetrahydrofuranylmethoxy, tetrahydropyranylmethoxy; n = 1-3], were prepared. Thus, a mixture of 6-amino-4-[(3-chloro-4-fluorophenyl)amino]-7-cyclopropylmethoxyquinazoline (preparation given) and diisopropylethylamine in THF was dropwise treated under ice-cooling with BrCH<sub>2</sub>CH<sub>2</sub>CHCO<sub>2</sub>Cl (preparation given) in CH<sub>2</sub>Cl<sub>2</sub> followed by stirring for 1 h under ice-cooling and for 2 h at room temperature and

addition of (S)-(2-hydroxypropylamino)acetic acid tert-Bu ester in CH<sub>2</sub>Cl<sub>2</sub> to give after stirring over night at room temperature and stirring for 5 h at 60° 64% 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-[N-(tert-butyloxycarbonylmethyl)-N-((S)-2-hydroxyprop-1-yl)amino]-1-oxo-2-buten-1-yl)amino]-7-cyclopropylmethoxyquinazoline. Several I inhibited epidermal growth factor (EGF)-dependent proliferation of F/L-HERc cells with IC<sub>50</sub> = 0.02-15 nM. The invention relates to the use of the title compds. for treating tumor diseases, and lung and respiratory tract disorders.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:762992 CAPLUS

DN 135:303907

TI Preparation of quinazolines as inhibitors of epidermal growth factor-mediated signal transduction.

IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Blech, Stefan; Solca, Flavio

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077104	A1	20011018	WO 2001-EP3694	20010331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 2000-10017539A 20000408 DE 2000-10040525A 20000818				

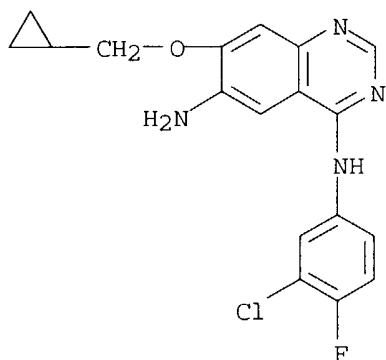
DE 10017539	A1	20011011	DE 2000-10017539	20000408
DE 10040525	A1	20020228	DE 2000-10040525	20000818
AU 2001063831	A5	20011023	AU 2001-63831	20010331
			DE 2000-10017539A	20000408
			DE 2000-10040525A	20000818
			WO 2001-EP3694 W	20010331
EP 1280798	A1	20030205	EP 2001-938076	20010331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			DE 2000-10017539A	20000408
			DE 2000-10040525A	20000818
			WO 2001-EP3694 W	20010331
JP 2003530395	T2	20031014	JP 2001-575577	20010331
			DE 2000-10017539A	20000408
			DE 2000-10040525A	20000818
			WO 2001-EP3694 W	20010331

## PATENT FAMILY INFORMATION:

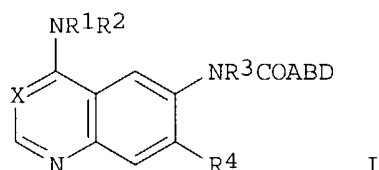
FAN 2001:747043

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10017539	A1	20011011	DE 2000-10017539	20000408
	US 2001044435	A1	20011122	US 2001-816003	20010323
	US 6627634	B2	20030930		
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
	WO 2001077104	A1	20011018	WO 2001-EP3694	20010331
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
	AU 2001063831	A5	20011023	AU 2001-63831	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
				WO 2001-EP3694 W	20010331
	EP 1280798	A1	20030205	EP 2001-938076	20010331
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
				WO 2001-EP3694 W	20010331
	JP 2003530395	T2	20031014	JP 2001-575577	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
				WO 2001-EP3694 W	20010331
OS	MARPAT 135:303907				
IT	<b>290304-07-3P</b>				
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(preparation of quinazolines as inhibitors of epidermal growth factor-mediated signal transduction)				
RN	290304-07-3 CAPLUS				

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy) - (9CI) (CA INDEX NAME)



GI



AB Title compds. [I; X = NCN, N; R1 = H, alkyl; R2 = (substituted) Ph, PhCH2, PhCH2CH2; R3 = H, alkyl; R4 = H, alkoxy, cycloalkoxy, cycloalkylalkoxy; A = (substituted) vinylene; B = bond, (fluoro)alkylene; D = substituted pyrrolidinyl, piperidinyl, piperazinyl, etc.], were prepared. Thus, 4-[(3-chloro-4-fluorophenyl)amino]-6-[[4-(piperazin-1-yl)-1-oxo-2-buten-1-yl]amino]-7-cyclopropylmethoxyquinazoline (preparation given) in THF was treated with Et3N and then with 3-bromodihydrofuran-2-one in THF under ice cooling followed by stirring for 48 h at room temperature to give 56% 4-[(3-chloro-4-fluorophenyl)amino]-6-[[4-[4-(2-oxotetrahydrofuran-3-yl)piperazin-1-yl]-1-oxo-2-buten-1-yl]amino]-7-cyclopropylmethoxyquinazoline. The latter inhibited epidermal growth factor (EGF)-dependent proliferation of F/L-HERc cells with IC50 = 0.05 nM.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:747043 CAPLUS  
DN 135:303901  
TI Bicyclic heterocycles as inhibitors of epidermal growth factor receptor mediated signal transduction  
IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Blech, Stefan; Solca, Flavio  
PA Boehringer Ingelheim Pharma KG, Germany  
SO Ger. Offen., 28 pp.  
CODEN: GWXXBX  
DT Patent

LA German  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10017539	A1	20011011	DE 2000-10017539	20000408
	US 2001044435	A1	20011122	US 2001-816003	20010323
	US 6627634	B2	20030930		
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
WO	2001077104	A1	20011018	WO 2001-EP3694	20010331
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
AU	2001063831	A5	20011023	AU 2001-63831	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
EP	1280798	A1	20030205	WO 2001-EP3694 W	20010331
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			EP 2001-938076	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
JP	2003530395	T2	20031014	WO 2001-EP3694 W	20010331
				JP 2001-575577	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
				WO 2001-EP3694 W	20010331

## PATENT FAMILY INFORMATION:

FAN 2001:762992

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001077104	A1	20011018	WO 2001-EP3694	20010331
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
DE	10017539	A1	20011011	DE 2000-10017539	20000408
DE	10040525	A1	20020228	DE 2000-10040525	20000818
AU	2001063831	A5	20011023	AU 2001-63831	20010331
				DE 2000-10017539A	20000408
				DE 2000-10040525A	20000818
EP	1280798	A1	20030205	WO 2001-EP3694 W	20010331
				EP 2001-938076	20010331

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003530395 T2 20031014

DE 2000-10017539A 20000408  
DE 2000-10040525A 20000818  
WO 2001-EP3694 W 20010331  
JP 2001-575577 20010331  
DE 2000-10017539A 20000408  
DE 2000-10040525A 20000818  
WO 2001-EP3694 W 20010331

OS MARPAT 135:303901

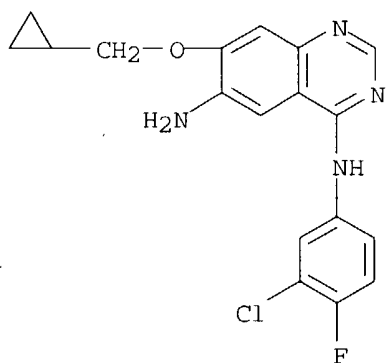
IT **290304-07-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

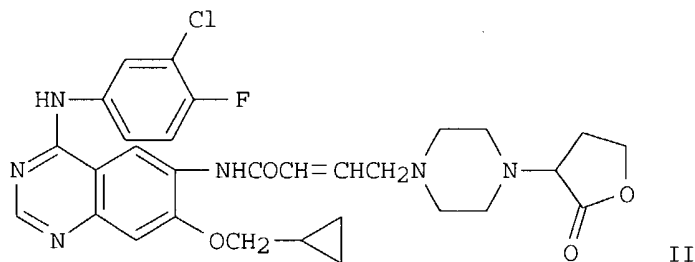
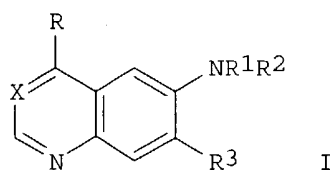
(preparation of bicyclic heterocycles as inhibitors of epidermal growth  
factor receptor mediated signal transduction)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-  
(cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



GI



AB Bicyclic heterocycles I [X = N, CCN; R = substituted NH<sub>2</sub>; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = acyl; R<sub>3</sub> = H, (un)substituted alkoxy, cycloalkoxy, tetrahydrofuranyloxy, tetrahydropyranyloxy, tetrahydrofuranylmethoxy, tetrahydropyranylmethoxy] were prepared for use as inhibitors of tyrosine kinase-mediated signal transduction for treatment of tumors and diseases of the lung and airway. Thus, 4-[(3-chloro-4-fluorophenyl)amino]-7-fluoro-6-nitroquinazoline was treated with cyclopropylmethanol, followed by reduction to the amine, reaction with 4-bromocrotonic acid and N-tert.-butoxycarbonylpiperazine, and deblocking to give the quinazoline II. II had an IC<sub>50</sub> for inhibition of epidermal growth factor dependent proliferation of 0.05 nM.

L6 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:911231 CAPLUS

DN 134:71599

TI Preparation of aminoquinazolines and aminoquinolines as epidermal growth factor receptor signal transduction inhibitors.

IN Himmelsbach, Frank; Langkopf, Elke; Metz, Thomas; Solca, Flavio; Jung, Birgit; Baum, Anke

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078735	A1	20001228	WO 2000-EP5547	20000616
W:			AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
			DE 1999-19928281A	19990621
			US 1999-146644PP	19990730
			DE 2000-10023085A	20000511
DE 19928281	A1	20001228	DE 1999-19928281	19990621
DE 10023085	A1	20011115	DE 2000-10023085	20000511
BR 2000011834	A	20020312	BR 2000-11834	20000616
			DE 1999-19928281A	19990621
			DE 2000-10023085A	20000511
			WO 2000-EP5547 W	20000616
EP 1194418	A1	20020410	EP 2000-936888	20000616
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO	
			DE 1999-19928281A	19990621
			US 1999-146644PP	19990730
			DE 2000-10023085A	20000511
			WO 2000-EP5547 W	20000616
JP 2003502410	T2	20030121	JP 2001-504901	20000616
			DE 1999-19928281A	19990621
			US 1999-146644PP	19990730
			DE 2000-10023085A	20000511



EE 200100695	A	20030217	WO 2000-EP5547 W 20000616 EE 2001-695 20000616 DE 1999-19928281A 19990621 US 1999-146644PP 19990730 DE 2000-10023085A 20000511
BG 106189	A	20020830	WO 2000-EP5547 W 20000616 BG 2001-106189 20011207 DE 1999-19928281A 19990621 US 1999-146644PP 19990730 DE 2000-10023085A 20000511
US 2002169180	A1	20021114	WO 2000-EP5547 W 20000616 US 2001-16280 20011210 DE 1999-19928281A 19990621 US 1999-146644PP 19990730 DE 2000-10023085A 20000511
NO 2001006185	A	20011218	NO 2001-6185 20011218 DE 1999-19928281A 19990621 US 1999-146644PP 19990730 DE 2000-10023085A 20000511
ZA 2001010351	A	20020618	WO 2000-EP5547 W 20000616 ZA 2001-10351 20011218 DE 1999-19928281A 19990621

OS MARPAT 134:71599

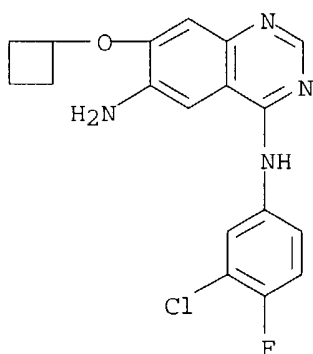
IT **290303-28-5P 290303-32-1P 290303-41-2P****290303-42-3P 290303-43-4P 290304-07-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminoquinazolines and aminoquinolines as epidermal growth factor receptor signal transduction inhibitors)

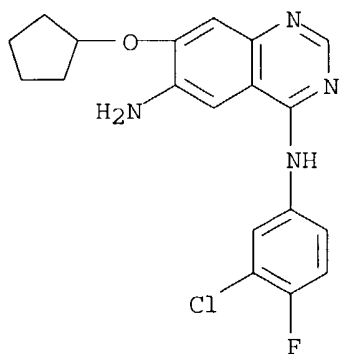
RN 290303-28-5 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclobutyloxy)-(9CI) (CA INDEX NAME)



RN 290303-32-1 CAPLUS

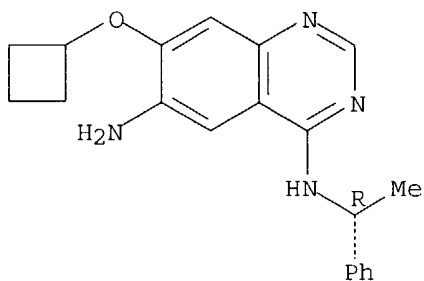
CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopentyloxy)-(9CI) (CA INDEX NAME)



RN 290303-41-2 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclobutyloxy)-N4-[(1R)-1-phenylethyl]- (9CI)  
(CA INDEX NAME)

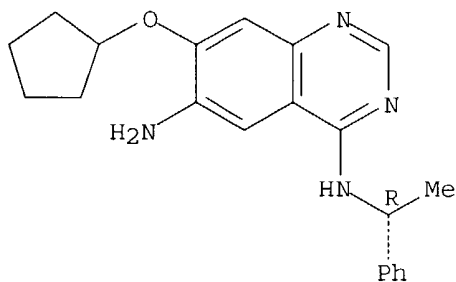
Absolute stereochemistry.



RN 290303-42-3 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclopentyloxy)-N4-[(1R)-1-phenylethyl]- (9CI)  
(CA INDEX NAME)

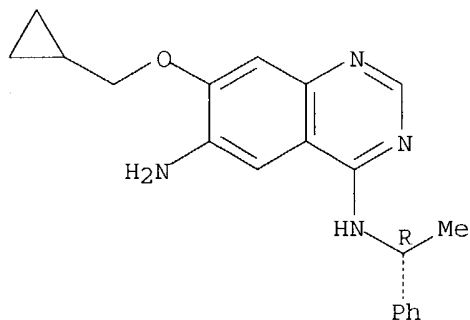
Absolute stereochemistry.



RN 290303-43-4 CAPLUS

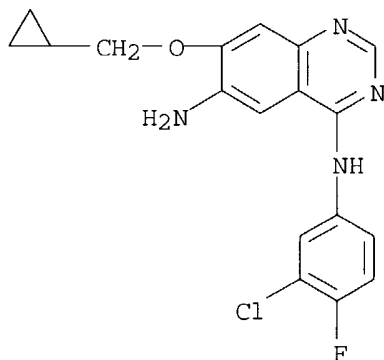
CN 4,6-Quinazolinediamine, 7-(cyclopropylmethoxy)-N4-[(1R)-1-phenylethyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

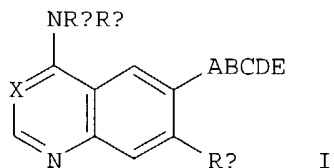


RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy)- (9CI) (CA INDEX NAME)



GI



AB Title compds. [I; Ra = H, alkyl; Rb = (substituted) Ph, PhCH<sub>2</sub>, PhCH<sub>2</sub>CH<sub>2</sub>; Rc = (substituted) cycloalkoxy, cycloalkylalkoxy; A = (alkyl-substituted) imino; B = CO, SO<sub>2</sub>; C = (substituted) allenylene, vinylene, butadienylene, ethynylene; D = (fluorinated) alkylene, carbonylalkylene, sulfonylalkylene, carbonyloxyalkylene, carbonyliminoalkylene, bond, etc.; E = amino, (substituted) alkylamino, dialkylamino, etc.], were prepared Thus, 6-amino-4-[(3-bromophenyl)amino]-7-[3-(1-methylpiperidin-4-yl)propoxy]quinazoline (preparation given) in CH<sub>2</sub>Cl<sub>2</sub> containing Et<sub>3</sub>N at -10° was treated with acryloyl chloride in THF to give 35% 4-[(3-bromophenyl)amino]-7-[3-(1-methylpiperidin-4-yl)propoxy]-6-[(vinylcarbonyl)amino]quinazoline. The latter inhibited EGF-dependent proliferation of F/L HERC cells with IC<sub>50</sub> = <0.35 nM.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:628125 CAPLUS  
 DN 133:207919  
 TI Preparation of 4-amino-quinazoline and quinoline derivatives having an inhibitory effect on signal transduction mediated by tyrosine kinases useful for treating tumoral diseases, lung and respiratory tract diseases  
 IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Metz, Thomas; Solca, Flavio; Blech, Stefan  
 PA Boehringer Ingelheim Pharma K.-G., Germany  
 SO PCT Int. Appl., 232 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051991	A1	20000908	WO 2000-EP1496	20000224
W:			AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW:			GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
			DE 1999-19908567A	19990227
			DE 1999-19911366A	19990315
			DE 1999-19928306A	19990621
			US 1999-149329PP	19990817
			DE 1999-19954816A	19991113
DE 19908567	A1	20000831	DE 1999-19908567	19990227
DE 19911366	A1	20000921	DE 1999-19911366	19990315
DE 19928306	A1	20001228	DE 1999-19928306	19990621
DE 19954816	A1	20010517	DE 1999-19954816	19991113
CA 2361174	AA	20000908	CA 2000-2361174	20000224
			DE 1999-19908567A	19990227
			DE 1999-19911366A	19990315
			DE 1999-19928306A	19990621
			US 1999-149329PP	19990817
			DE 1999-19954816A	19991113
			WO 2000-EP1496 W	20000224
EP 1157011	A1	20011128	EP 2000-910695	20000224
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO	
			DE 1999-19908567A	19990227
			DE 1999-19911366A	19990315
			DE 1999-19928306A	19990621
			US 1999-149329PP	19990817
			DE 1999-19954816A	19991113
			WO 2000-EP1496 W	20000224
BR 2000008524	A	20011218	BR 2000-8524	20000224
			DE 1999-19908567A	19990227
			DE 1999-19911366A	19990315
			DE 1999-19928306A	19990621
			US 1999-149329PP	19990817

JP 2002538145	T2	20021112	DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224 JP 2000-602218 20000224 DE 1999-19908567A 19990227 DE 1999-19911366A 19990315 DE 1999-19928306A 19990621 US 1999-149329PP 19990817 DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224
EE 200100449	A	20021216	EE 2001-449 20000224 DE 1999-19908567A 19990227 DE 1999-19911366A 19990315 DE 1999-19928306A 19990621 US 1999-149329PP 19990817 DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224
BG 105765	A	20020329	BG 2001-105765 20010801 DE 1999-19908567A 19990227 DE 1999-19911366A 19990315 DE 1999-19928306A 19990621 US 1999-149329PP 19990817 DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224
HR 2001000617	A1	20021031	HR 2001-617 20010823 DE 1999-19908567A 19990227 DE 1999-19911366A 19990315 DE 1999-19928306A 19990621 US 1999-149329PP 19990817 DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224
NO 2001004114	A	20011015	NO 2001-4114 20010824 DE 1999-19908567A 19990227 DE 1999-19911366A 19990315 DE 1999-19928306A 19990621 US 1999-149329PP 19990817 DE 1999-19954816A 19991113 WO 2000-EP1496 W 20000224

## PATENT FAMILY INFORMATION:

FAN 2000:607393

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19908567	A1	20000831	DE 1999-19908567	19990227
	CA 2361174	AA	20000908	CA 2000-2361174	20000224
				DE 1999-19908567A	19990227
				DE 1999-19911366A	19990315
				DE 1999-19928306A	19990621
				US 1999-149329PP	19990817
				DE 1999-19954816A	19991113
				WO 2000-EP1496 W	20000224
WO	2000051991	A1	20000908	WO 2000-EP1496	20000224
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
NZ 513802	A	20010928	NZ 2000-513802 20000224
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
EP 1157011	A1	20011128	EP 2000-910695 20000224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224
BR 2000008524	A	20011218	BR 2000-8524 20000224
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224
JP 2002538145	T2	20021112	JP 2000-602218 20000224
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224
EE 200100449	A	20021216	EE 2001-449 20000224
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224
ZA 2001005983	A	20020920	ZA 2001-5983 20010720
			DE 1999-19908567A 19990227
BG 105765	A	20020329	BG 2001-105765 20010801
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224
HR 2001000617	A1	20021031	HR 2001-617 20010823
			DE 1999-19908567A 19990227
			DE 1999-19911366A 19990315
			DE 1999-19928306A 19990621
			US 1999-149329PP 19990817
			DE 1999-19954816A 19991113
			WO 2000-EP1496 W 20000224

NO 2001004114

A

20011015

NO 2001-4114

20010824

DE 1999-19908567A 19990227

DE 1999-19911366A 19990315

DE 1999-19928306A 19990621

US 1999-149329PP 19990817

DE 1999-19954816A 19991113

WO 2000-EP1496 W 20000224

OS MARPAT 133:207919

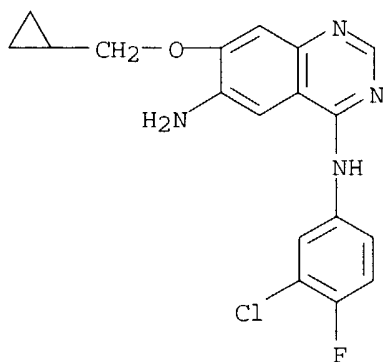
IT **290304-07-3**

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of aminoquinazoline and aminoquinoline derivs. having an inhibitory effect on signal transduction mediated by tyrosine kinases useful for treating tumoral diseases, lung and respiratory tract diseases)

RN 290304-07-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopropylmethoxy) - (9CI) (CA INDEX NAME)

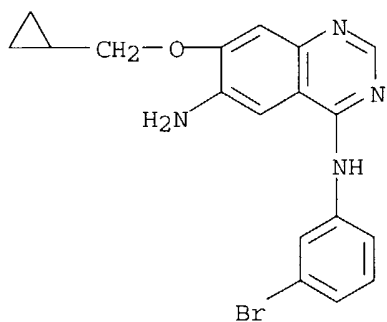
IT **290303-24-1P 290303-26-3P 290303-27-4P****290303-28-5P 290303-29-6P 290303-30-9P****290303-32-1P 290303-41-2P 290303-42-3P****290303-43-4P 290303-44-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

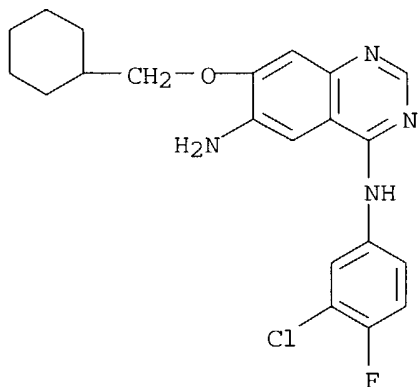
(preparation of aminoquinazoline and aminoquinoline derivs. having an inhibitory effect on signal transduction mediated by tyrosine kinases useful for treating tumoral diseases, lung and respiratory tract diseases)

RN 290303-24-1 CAPLUS

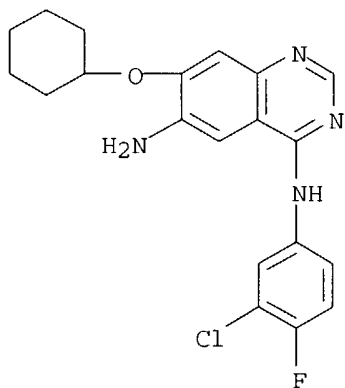
CN 4,6-Quinazolinediamine, N4-(3-bromophenyl)-7-(cyclopropylmethoxy) - (9CI) (CA INDEX NAME)



RN 290303-26-3 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclohexylmethoxy)-  
(9CI) (CA INDEX NAME)

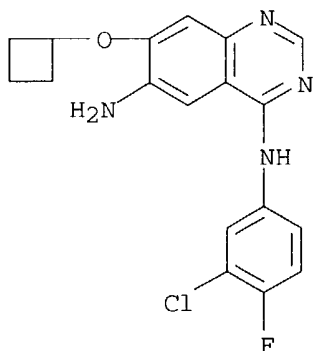
RN 290303-27-4 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclohexyloxy)-  
(9CI) (CA INDEX NAME)

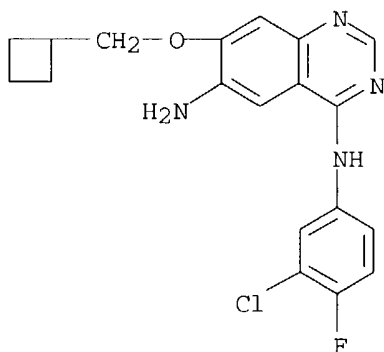
RN 290303-28-5 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclobutyloxy)-  
(9CI) (CA INDEX NAME)

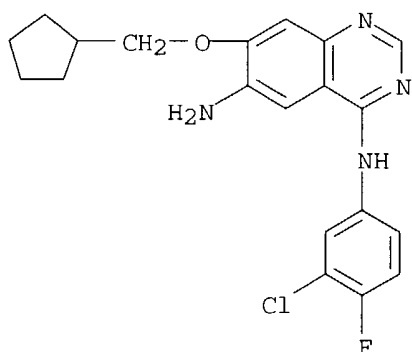




RN 290303-29-6 CAPLUS

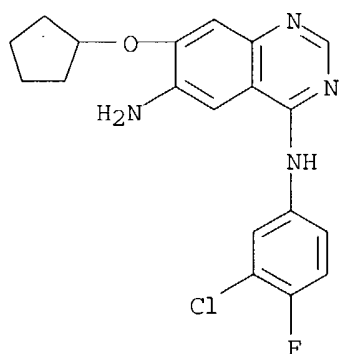
CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclobutylmethoxy)-  
(9CI) (CA INDEX NAME)

RN 290303-30-9 CAPLUS

CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-  
(cyclopentylmethoxy)- (9CI) (CA INDEX NAME)

RN 290303-32-1 CAPLUS

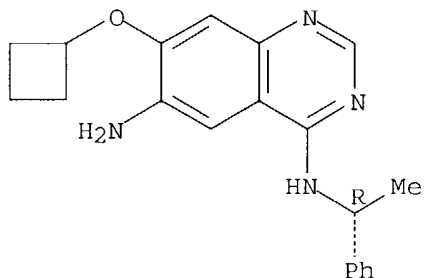
CN 4,6-Quinazolinediamine, N4-(3-chloro-4-fluorophenyl)-7-(cyclopentylmethoxy)-  
(9CI) (CA INDEX NAME)



RN 290303-41-2 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclobutyloxy)-N4-[(1R)-1-phenylethyl]- (9CI)  
(CA INDEX NAME)

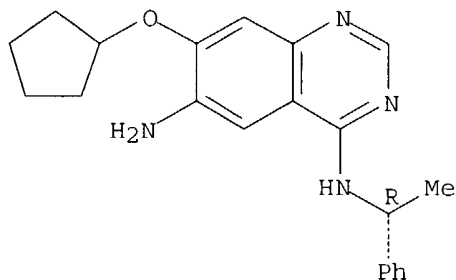
Absolute stereochemistry.



RN 290303-42-3 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclopentyloxy)-N4-[(1R)-1-phenylethyl]- (9CI)  
(CA INDEX NAME)

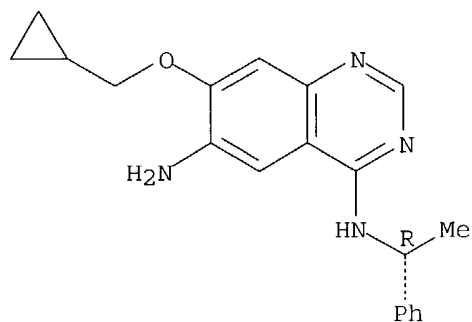
Absolute stereochemistry.



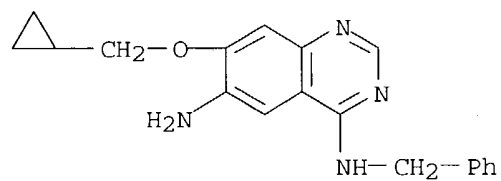
RN 290303-43-4 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclopropylmethoxy)-N4-[(1R)-1-phenylethyl]-  
(9CI) (CA INDEX NAME)

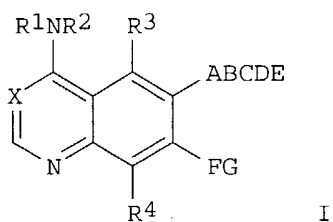
Absolute stereochemistry.



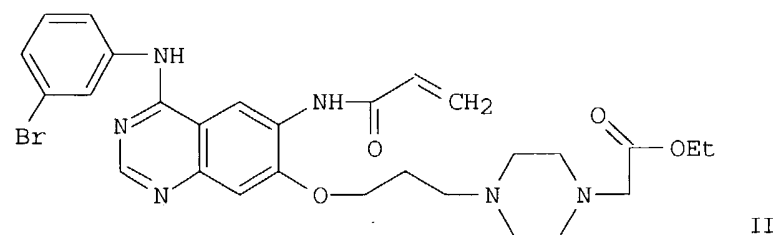
RN 290303-44-5 CAPLUS

CN 4,6-Quinazolinediamine, 7-(cyclopropylmethoxy)-N4-(phenylmethyl)- (9CI)  
(CA INDEX NAME)

GI



I



II

AB Title compds. [I; R1 = H, C1-C4-alkyl; R2 = (un)substituted Ph, benzyl, 1-phenylethyl; R3, R4 independently = H, F, Cl, CH3O, CH3OCH2, (CH3)2NCH2,

(CH<sub>3</sub>CH<sub>2</sub>)<sub>2</sub>NCH<sub>2</sub>, pyrrolidino, piperidino, morpholino; X = C(CN), N; A = O, NH, (C1-C4)-alkylN; B = CO, SO<sub>2</sub>; C = 1,3-allenylene, 1,1-vinylene, 1,2-vinylene, 1,3-butadien-1,4-ylene, with CH<sub>3</sub>, CF<sub>3</sub> substitution; D = alkylene, CO-alkylene, SO<sub>2</sub>-alkylene; CO, SO<sub>2</sub>; E = HOCO(CH<sub>2</sub>)<sub>n</sub>NR<sub>5</sub>, (HO)2P(:O)(CH<sub>2</sub>)<sub>n</sub>NR<sub>5</sub>; n = 1-6; R<sub>5</sub> = H, alkyl], tautomers, stereoisomers, and physiol. acceptable salts are prepared and having valuable pharmacol. properties, particularly an inhibiting effect on signal transduction mediated by tyrosine kinases. Title compds. are useful for treating tumoral diseases, diseases of the lungs and respiratory tract. Thus, the title compound II was prepared and tested by Cell Titer 96TM Aqueous Nonradioactive Cell Proliferation Assay.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 15:25:16 ON 16 APR 2004)

FILE 'REGISTRY' ENTERED AT 15:25:26 ON 16 APR 2004

L1 STRUCTURE UPLOADED

L2 12 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 15:25:56 ON 16 APR 2004

L3 16 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:29 ON 16 APR 2004

S L1

FILE 'REGISTRY' ENTERED AT 15:26:35 ON 16 APR 2004

L4 12 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:36 ON 16 APR 2004

L5 0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:26:42 ON 16 APR 2004

L6 12 S L2

L7 16 S L3

=> d l3 fbib hitstr abs total

YOU HAVE REQUESTED DATA FROM FILE 'MARPAT' - CONTINUE? (Y)/N:y

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'MARPAT'

The following are valid formats:

MSTR ----- All Markush structure(s) and related text information

MSTR(n) -- Markush structure(n) and related text information

IDE ----- AN and MSTR

ABS ----- AB

ALL ----- BIB, AB, IND, RE, and MSTR

APPS ----- AI, PRAI

BIB ----- AN, plus Bibliographic Data and PI table (default)

CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data

DALL ----- ALL, delimited (end of each field identified)

DMAX ----- MAX, delimited for post-processing  
 FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM  
 IND ----- Indexing Data  
 IPC ----- International Patent Classifications  
 MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT, and FQHIT  
 SCAN ----- CC, SX, TI, ST, IT, and FQHIT (random display,  
                   no answer numbers)  
 STD ----- BIB, IPC, and NCL (standard patent information)

IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit text terms and the Markush  
                   structures containing the query structure  
 FHIT ----- Fields containing the first hit text terms and the first  
                   Markush structures containing the query structure  
 QHIT ----- Fields containing query focus hit text terms and the  
                   Markush structures containing the query structure  
 FQHIT ----- Fields containing the first query focus hit text terms and  
                   the first Markush structures containing the query structure

To display a particular field or fields, enter the display field  
 codes. For a list of the display field codes, enter "HELP DFIELDS"  
 at an arrow prompt (=>). Examples of formats include: "TI";  
 "TI,MSTR,ABS"; "BIB,ST"; "TI,IND"; "TI,SO". You may specify the  
 format fields in any order and the information will be displayed  
 in the same order as the format specification.

All of the formats (except for SAM, SCAN, FHIT, HIT, FQHIT, or QHIT) may  
 be used with the DISPLAY ACC command to display the record for a  
 specified Accession Number.

ENTER DISPLAY FORMAT (BIB):end

=>

=> fdile caplus

FDILE IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter  
 "HELP COMMANDS" at an arrow prompt (=>).

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.44

499.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.32

FILE 'CAPLUS' ENTERED AT 15:28:23 ON 16 APR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Apr 2004 VOL 140 ISS 17  
FILE LAST UPDATED: 15 Apr 2004 (20040415/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 15:25:16 ON 16 APR 2004)

FILE 'REGISTRY' ENTERED AT 15:25:26 ON 16 APR 2004

L1 STRUCTURE UPLOADED  
L2 12 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 15:25:56 ON 16 APR 2004

L3 16 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:29 ON 16 APR 2004  
S L1

FILE 'REGISTRY' ENTERED AT 15:26:35 ON 16 APR 2004

L4 12 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 15:26:36 ON 16 APR 2004

L5 0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:26:42 ON 16 APR 2004

L6 12 S L2  
L7 16 S L3

FILE 'MARPAT' ENTERED AT 15:27:58 ON 16 APR 2004

FILE 'CAPLUS' ENTERED AT 15:28:03 ON 16 APR 2004

FILE 'CAPLUS' ENTERED AT 15:28:23 ON 16 APR 2004

=> s 13

L8 16 L3

=&gt; d 18 fbib hitstr abs total

L8 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:434373 CAPLUS

DN 139:6886

TI Preparation of quinazoline derivatives for the treatment of T cell mediated diseases

IN Moore, Nelly Corine; Oldham, Keith

PA Astrazeneca A.B., Swed.; Astrazeneca UK Limited

SO PCT Int. Appl., 217 pp.

CODEN: PIXXD2

DT Patent

LA English

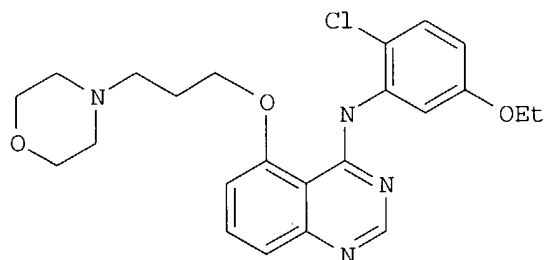
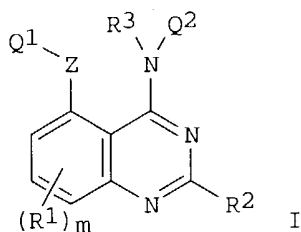
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003045395	A1	20030605	WO 2002-GB5222	20021120
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

GB 2001-28108 A 20011123

OS MARPAT 139:6886

GI



II

AB Title compds. I [m = 0-3; R1 = halo, CF3, CN, NO2, etc.; R2 = H, alkyl; R3 = H, alkyl; Z = bond, O, SOO-2, amino, etc.; Q1 = aryl(alkyl), cycloalkyl, cycloalkenyl, heteroaryl, etc.; Q2 = phenyl] are prepared For instance, 4-[[2-chloro-5-ethoxyphenyl]amino]-5-hydroxy-7-methoxyquinazoline (preparation given) was coupled to 4-(3-hydroxypropyl)morpholine (CH2Cl2, Ph3P, t-BuO2C-N=N-CO2Bu-t) to give II. I are useful for the prevention or treatment of T cell mediated diseases.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:487536 CAPLUS

DN 137:63250

TI Quinazoline derivatives as inhibitors of human EFG tyrosine kinase

IN Himmelsbach, Frank; Langkopf, Elke; Blech, Stefan; Jung, Birgit; Baum, Elke; Solca, Flavio

PA Boehringer Ingelheim Pharma Kg, Germany

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA German

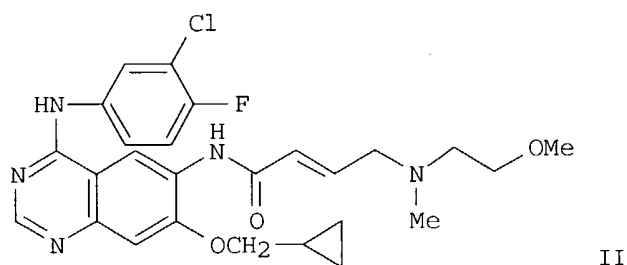
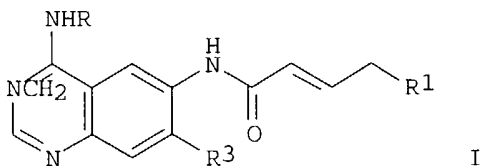
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002050043	A1	20020627	WO 2001-EP14569	20011212
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				DE 2000-10063435A	20001220
	DE 10063435	A1	20020704	DE 2000-10063435	20001220
	AU 2002019174	A5	20020701	AU 2002-19174	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	EP 1345910	A1	20030924	EP 2001-271363	20011212
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	EE 200300300	A	20031015	EE 2003-300	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	BR 2001016266	A	20040217	BR 2001-16266	20011212
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212
	US 2002173509	A1	20021121	US 2001-23099	20011217
				DE 2000-10063435A	20001220
				US 2000-259201PP	20001228
	NO 2003002726	A	20030616	NO 2003-2726	20030616
				DE 2000-10063435A	20001220
				WO 2001-EP14569W	20011212

OS MARPAT 137:63250



GI



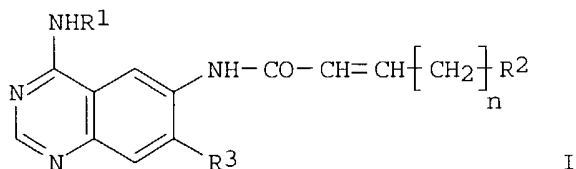
AB Quinazoline derivs. I [R = PhCH<sub>2</sub>, PhCHMe, 3,4-Cl(F)C<sub>6</sub>H<sub>3</sub>; R<sub>1</sub> = NMe<sub>2</sub>, NEt<sub>2</sub>, NEtCH<sub>2</sub>CH<sub>2</sub>OMe, N(CH<sub>2</sub>CH<sub>2</sub>OMe)<sub>2</sub>, morpholino; R<sub>2</sub> = Me, Et, CHMe<sub>2</sub>, cyclopropyl, CH<sub>2</sub>CH<sub>2</sub>OMe, 3-tetrahydrofuryl, 2-tetrahydrofurylmethyl, 3-tetrahydrofurylmethyl, 4-tetrahydropyranyl, 4-tetrahydropyranylmethyl; R<sub>3</sub> = cyclopropylmethoxy, cyclobutyloxy, cyclopentyloxy, 3-tetrahydrofuryloxy, 2-tetrahydrofurylmethoxy, 3-tetrahydrofurylmethoxy, 4-tetrahydropyranyloxy, 4-tetrahydropyranylmethoxy] were prepared for use as inhibitors of signal transduction caused by human EFG receptor tyrosine kinase. They are useful in the treatment of tumoral diseases, diseases of the lung and the respiratory tract, the gastrointestinal tract, and the gallbladder and bile ducts. Thus, the quinazoline II was prepared by converting bromocrotonic acid to its chloride, and reaction with 4-[(3-chloro-4-fluorophenyl)amino]-6-amino-7-cyclopropylmethoxyquinazoline, followed by MeNHCH<sub>2</sub>CH<sub>2</sub>OMe. II had an IC<sub>50</sub> against human EFG receptor kinase of 0.7 nM.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2002:171889 CAPLUS  
DN **136:232315**  
TI Preparation of 4-amino-6-vinylcarbonylaminoquinazolines as epidermal growth factor receptor signal transduction inhibitors  
IN Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit; Blech, Stefan; Solca, Flavio  
PA Boehringer Ingelheim Pharma Kg, Germany  
SO PCT Int. Appl., 78 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI WO 2002018373 A1 20020307 WO 2001-EP9537 20010818  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 DE 10042060 A1 20020307 DE 2000-10042060A 20000826  
 US 2002077330 A1 20020620 DE 2000-10042060 20000826  
 US 6653305 B2 20031125 US 2001-929931 20010815  
 DE 2000-10042060A 20000826  
 US 2000-230389PP 20000906  
 AU 2001084021 A5 20020313 AU 2001-84021 20010818  
 DE 2000-10042060A 20000826  
 WO 2001-EP9537 W 20010818  
 EP 1315717 A1 20030604 EP 2001-962953 20010818  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 DE 2000-10042060A 20000826  
 WO 2001-EP9537 W 20010818  
 OS MARPAT 136:232315  
 GI

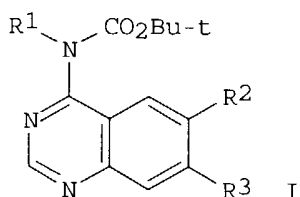


AB Title compds. [I; R1 = PhCH<sub>2</sub>, 1-phenylethyl, (substituted) Ph; R2 = N-[(1,3-dioxolan-2-yl)methyl]methylamino, (substituted) R<sub>4</sub>OCOCH<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH, 2-oxomorpholin-4-yl; R<sub>4</sub> = H, alkyl; R<sub>3</sub> = H, (alkoxy)alkoxy, cycloalkylalkoxy, tetrahydrofuran-3-yloxy, tetrahydropyran-3-yloxy, tetrahydropyran-4-yloxy, tetrahydrofuran-ylmethoxy, tetrahydropyran-ylmethoxy; n = 1-3], were prepared Thus, a mixture of 6-amino-4-[(3-chloro-4-fluorophenyl)amino]-7-cyclopropylmethoxyquinazoline (preparation given) and diisopropylethylamine in THF was dropwise treated under ice-cooling with BrCH<sub>2</sub>CH:CHCO<sub>2</sub>Cl (preparation given) in CH<sub>2</sub>Cl<sub>2</sub> followed by stirring for 1 h under ice-cooling and for 2 h at room temperature and addition of (S)-(2-hydroxypropylamino)acetic acid tert-Bu ester in CH<sub>2</sub>Cl<sub>2</sub> to give after stirring over night at room temperature and stirring for 5 h at 60° 64% 4-[(3-chloro-4-fluorophenyl)amino]-6-[(4-[N-(tert-butylloxycarbonylmethyl)-N-((S)-2-hydroxyprop-1-yl)amino]-1-oxo-2-buten-1-yl)amino]-7-cyclopropylmethoxyquinazoline. Several I inhibited epidermal growth factor (EGF)-dependent proliferation of F/L-HERc cells with IC<sub>50</sub> = 0.02-15 nM. The invention relates to the use of the title compds. for treating tumor diseases, and lung and respiratory tract disorders.  
 RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:157044 CAPLUS  
 DN **136:216752**  
 TI Preparation of 4-aminoquinazolines as inhibitors of signal transduction mediated by tyrosine kinase  
 IN Himmelsbach, Frank  
 PA Boehringer Ingelheim Pharma K.-G., Germany  
 SO Ger. Offen., 10 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10040527	A1	20020228	DE 2000-10040527	20000818
				DE 2000-10040527	20000818
OS	MARPAT 136:216752				
GI					



AB Title compds. [I; R1 = PhCH2, (substituted) Ph; R2 = OH, alkylcarbonyloxy, amino, NO2; R3 = H, F, Cl, Br, cycloalkoxy, cycloalkylalkoxy, (substituted) alkoxy], and stereoisomers and salts thereof are claimed. I were said to inhibit signal transduction mediated by tyrosine kinase.

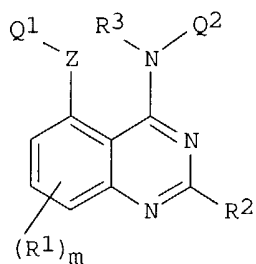
L8 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:904160 CAPLUS  
 DN **136:20087**  
 TI Preparation of 4-anilinoquinazoline derivatives for the treatment of tumors  
 IN Hennequin, Laurent Francois Andre; Ple, Patrick  
 PA Astrazeneca Ab, Swed.; Astrazeneca Uk Limited  
 SO PCT Int. Appl., 234 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094341	A1	20011213	WO 2001-GB2424	20010601
	WO 2001094341	C2	20030417		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,				

UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 EP 2001-934176 20010601  
 EP 1292594 A1 20030319  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 WO 2001-GB2424 W 20010601  
 BR 2001-11335 20010601  
 EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 WO 2001-GB2424 W 20010601  
 JP 2002-501890 20010601  
 EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 WO 2001-GB2424 W 20010601  
 BG 2002-107332 20021128  
 EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 WO 2001-GB2424 W 20010601  
 NO 2002-5792 20021202  
 EP 2000-401581 A 20000606  
 EP 2001-400297 A 20010207  
 EP 2001-400565 A 20010305  
 WO 2001-GB2424 W 20010601

OS MARPAT 136:20087  
 GI



AB The invention concerns quinazoline derivs. (I; e.g. 4-(2-chloro-5-methoxyanilino)-7-methoxy-5-(3-morpholinopropoxy)quinazoline (1)), processes for their preparation, pharmaceutical compns. containing them and their use in the manufacture of a medicament for use as an anti-invasive agent in the containment and/or treatment of solid tumor disease. Although biol. assay

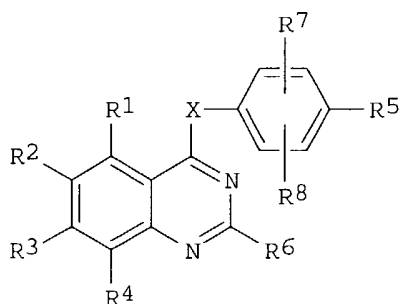
methods are described, no test results are reported. It is believed that the antitumor activity is due to inhibition of one or more of the non-receptor tyrosine-specific protein kinases of the Src family that are involved in the signal transduction steps that lead to the invasiveness and migratory ability of metastasizing tumor cells. In I, according to the 1st claim, m = 0-3; each R1 = halo, trifluoromethyl, cyano, isocyano, nitro, hydroxy, mercapto, amino, formyl, carboxy, carbamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N,N-di[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, (3-6C)alkenoylamino, N-(1-6C)alkyl-(3-6C)alkenoylamino, (3-6C)alkynoylamino, N-(1-6C)alkyl-(3-6C)alkynoylamino, N-(1-6C)alkylsulfamoyl, N,N-di[(1-6C)alkyl]sulfamoyl, (1-6C)alkanesulfonylamino and N-(1-6C)alkyl-(1-6C)alkanesulfonylamino, or Q3-X1- (X1 = direct bond, O, S, SO, SO2, N(R4), CO, CH(OR4), CON(R4), N(R4)CO, SO2N(R4), N(R4)SO2, OC(R4)2, SC(R4)2 and N(R4)C(R4)2 (R4 = H or (1-6C)alkyl) and Q3 = aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl, (3-7C)cycloalkyl-, (1-6C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl), or (R1)m is (1-3C)alkylenedioxy, with addnl. optional substitution and/or insertion possible. R2 = H or (1-6C)alkyl; R3 = H or (1-6C)alkyl; Z = direct bond, O, S, SO, SO2, N(R11), CO, CH(OR11), CON(R11), N(R11)CO, SO2N(R11), N(R11)SO2, OC(R11)2, SC(R11)2 and N(R11)C(R11)2 (R11 = H, or (1-6C)alkyl). Q1 = aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl, or, when Z is a direct bond or O, Q1 may be (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, halo-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkoxy-(1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di[(1-6C)alkyl]amino-(1-6C)alkyl, (1-6C)alkylthio-(1-6C)alkyl, (1-6C)alkylsulfinyl-(1-6C)alkyl or (1-6C)alkylsulfonyl-(1-6C)alkyl, with addnl. optional substitution and/or insertion possible. Q2 = substituted Ph. More than 50 example preps. are included. For example, 1 was obtained by adding di-tert-Bu azodicarboxylate (0.208 g) dropwise to a stirred mixture of 4-(2-chloro-5-methoxyanilino)-5-hydroxy-7-methoxyquinazoline (0.2 g), 4-(3-hydroxypropyl)morpholine, PPh3 (0.237 g) and CH2Cl2 (3 mL). The reaction mixture was stirred at ambient temperature for 1 h.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

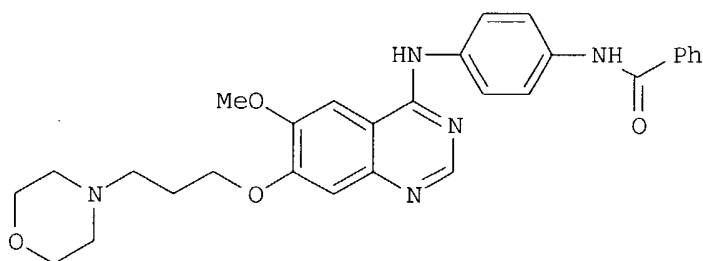
L8 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:228866 CAPLUS  
DN **134:266317**  
TI Preparation of quinazolines as aurora 2 kinase inhibitors  
IN Mortlock, Andrew Austen; Keen, Nicholas John; Jung, Frederic Henri; Brewster, Andrew George  
PA Astrazeneca AB, Swed.; Astrazeneca UK Limited  
SO PCT Int. Appl., 306 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI	WO 2001021596	A1	20010329	WO 2000-GB3580	20000918
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
	BR 2000014116	A	20020521	BR 2000-14116	20000918
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
	EP 1218354	A1	20020703	EP 2000-960840	20000918
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
	JP 2003509499	T2	20030311	JP 2001-524975	20000918
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
	EE 200200119	A	20030415	EE 2002-119	20000918
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
	BG 106492	A	20030131	BG 2002-106492	20020307
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
	ZA 2002002234	A	20030619	ZA 2002-2234	20020319
				GB 1999-22170	A 19990921
	NO 2002001399	A	20020430	NO 2002-1399	20020320
				GB 1999-22154	A 19990921
				GB 1999-22170	A 19990921
				WO 2000-GB3580	W 20000918
OS	MARPAT 134:266317				
GI					



I



II

AB Title compds. (I) [wherein X = O, S, SO, SO<sub>2</sub>, NH, or NR<sub>12</sub>; R<sub>12</sub> = H or alkyl; R<sub>1</sub>-R<sub>4</sub> = independently halo, CN, NO<sub>2</sub>, alkylsulfanyl, N(OH)R<sub>13</sub>, or R<sub>15</sub>X<sub>1</sub>; R<sub>13</sub> = H or alkyl; X<sub>1</sub> = a direct bond, O, CH<sub>2</sub>, OC(O), CO, CO<sub>2</sub>, S, SO, SO<sub>2</sub>, or (un)substituted NHCO, CONH, SO<sub>2</sub>NH, NHSO<sub>2</sub>, or NH; R<sub>15</sub> = H or (un)substituted hydrocarbyl, heterocyclyl, or alkoxy; R<sub>5</sub> = NHCO<sub>2</sub>R<sub>9</sub>, NHCOR<sub>9</sub>, NHSO<sub>2</sub>R<sub>9</sub>, COR<sub>9</sub>, CO<sub>2</sub>R<sub>9</sub>, SOR<sub>9</sub>, SO<sub>2</sub>OR<sub>9</sub>, CONR<sub>10</sub>R<sub>11</sub>, SONR<sub>10</sub>R<sub>11</sub>, or SO<sub>2</sub>NR<sub>10</sub>R<sub>11</sub>; R<sub>9</sub>-R<sub>11</sub> = independently H or (un)substituted hydrocarbyl or heterocyclyl; or R<sub>10</sub> and R<sub>11</sub> together with the N to which they are attached = (un)substituted heterocyclyl; R<sub>6</sub> = H or (un)substituted hydrocarbyl or heterocyclyl; R<sub>7</sub> and R<sub>8</sub> = independently H, halo, alkyl, (di)alkoxy(methyl), alkanoyl, CF<sub>3</sub>, CN, NHY<sub>2</sub>, alkenyl, alkynyl, or (un)substituted Ph, PhCH<sub>2</sub>, or heterocyclyl; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, a 7-step sequence involving (1) alkylation of morpholine with 1-bromo-3-chloropropane (49%), (2) addition of Et vanillate to yield Et 3-methoxy-4-(3-morpholinopropoxy)benzoate (100%), (3) nitration (86%), (4) reduction to the amine using 10% Pd/C (100%), (5) cycloaddn. with formamide to form the quinazoline (68%), (6) chlorination to give 4-chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline (60%), and (7) amination with N-benzoyl-4-aminoaniline (58%) yielded II. The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration

of

0.0193  $\mu$ M. In addition, II gave 50% inhibition of MCF-7 cell proliferation at 1.06  $\mu$ M and reduced BrdU incorporation into cellular DNA by 50% at 0.159-0.209  $\mu$ M.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:228865 CAPLUS

DN 134:266316

TI Preparation of quinazoline derivatives, method of preparation and use in

inhibiting aurora 2 kinase  
 IN Mortlock, Andrew Austen; Keen, Nicholas John  
 PA Astrazeneca AB, Swed.; Astrazeneca UK Limited  
 SO PCT Int. Appl., 83 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021595	A1	20010329	WO 2000-GB3562	20000918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG GB 1999-22173 A 19990921 BR 2000-14136 20000918 GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918 EP 1218357 A1 20020703 EP 2000-962682 20000918 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918 JP 2003509498 T2 20030311 JP 2001-524974 20000918 GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918 EE 200200148 A 20030415 EE 2002-148 20000918 GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918 ZA 2002001831 A 20030605 ZA 2002-1831 20020305 GB 1999-22173 A 19990921 NO 2002001395 A 20020515 NO 2002-1395 20020320 GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918 BG 106535 A 20021229 BG 2002-106535 20020320 GB 1999-22173 A 19990921 WO 2000-GB3562 W 20000918				
OS	MARPAT 134:266316			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB I or a salt, ester, amide or prodrug thereof, a method for the preparation of I and the use of the claimed compds. for inhibiting aurora 2 kinase are claimed. These compds. are useful in the treatment of cancer. In I: X is O, or S, S(O) or S(O)<sub>2</sub> or NR<sub>10</sub> where R<sub>10</sub> is H or C<sub>1-6</sub> alkyl. R<sub>5</sub> is OR<sub>11</sub>, NR<sub>12</sub>R<sub>13</sub> or SR<sub>11</sub> where R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> are independently optionally substituted hydrocarbonyl or optionally substituted heterocyclic groups, and R<sub>12</sub> and R<sub>13</sub> may addnl. form together with the N atom to which they are



attached, an optionally substituted aromatic or nonarom. heterocyclic ring which may contain further heteroatoms. R6 and R7 are independently H or hydrocarbyl. R8 and R9 are independently H, halo, C1-4 alkyl, C1-4 alkoxy, C1-4 alkoxyethyl, di(C1-4alkoxy)methyl, C1-4 alkanoyl, trifluoromethyl, cyano, amino, C2-5 alkenyl, C2-5 alkynyl, a Ph group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or nonarom. and may be saturated (linked via a ring C or N atom) or unsatd. (linked via a ring C atom), and which Ph, benzyl or heterocyclic group may bear on one or more ring C atoms up to 5 substituents selected from hydroxy, halo, C1-3 alkyl, C1-3 alkoxy, C1-3 alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C2-4 alkanoyl, C1-4 alkanoylamino, C1-4 alkoxyethyl, C1-4 alkylthio, C1-4 alkylsulfinyl, C1-4 alkylsulfonyl, carbamoyl, N-C1-4alkylcarbamoyl, N,N-di(C1-4alkyl)carbamoyl, aminosulfonyl, N-C1-4alkylaminosulfonyl, N,N-di(C1-4alkyl)aminosulfonyl, C1-4 alkylsulfonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halo, C1-3 alkyl, C1-3 alkoxy, C1-3 alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C1-4alkoxycarbonyl. R1, R2, R3, R4 are independently halo, cyano, nitro, C1-3 alkylthio, -N(OH)R14 (R14 is H, or C1-3 alkyl), or R16X1- (X1 represents a direct bond, -O-, -OC(O)-, -C(O)-, -S-, -SO-, -SO2-, -NR17C(O)-, -C(O)NR18-, -SO2NR19-, -NR20SO2- or -NR21- (R17, R18, R19, R20 and R21 each independently represents H, C1-3 alkyl or C1-3alkoxyC2-3alkyl), and R16 is H, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy). A method for preparing I comprises reacting II where X, R8 and R9 are as defined above, R1', R2', R3', R4' are groups R1, R2, R3, R4 as defined above resp., or precursors thereof; and R5 is a leaving group, with HCR6:CR7C(O)R5', where R6 and R7 are as defined above, R5' is a group R5 as defined above or a precursor group therefore; and thereafter if desired or necessary, converting any precursor groups R1', R2', R3', R4' or R5' to groups R1, R2, R3, R4 or R5 resp., or changing a group R5 to a different such group. The compds. of the invention inhibit the serine/threonine kinase activity of the aurora 2 kinase and thus inhibit the cell cycle and cell proliferation. Procedures for assessing these properties are described and test results are given for (E)-4-[4-(2-(3-methylcyclohexylaminocarbonyl)ethenyl)anilino]-6,7-dimethoxyquinazoline.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:228864 CAPLUS  
DN **134:252355**  
TI Preparation of quinazolines as aurora 2 kinase inhibitors  
IN Mortlock, Andrew Austen; Keen, Nicholas John  
PA Astrazeneca AB, Swed.; Astrazeneca UK Limited  
SO PCT Int. Appl., 101 pp.  
CODEN: PIXXD2

DT Patent  
LA English

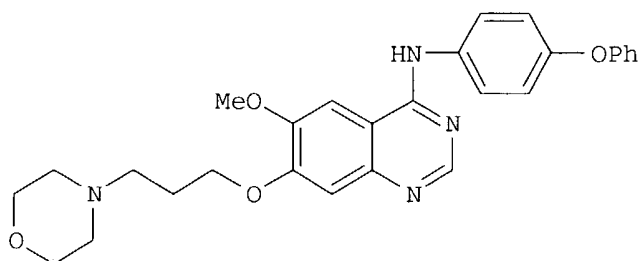
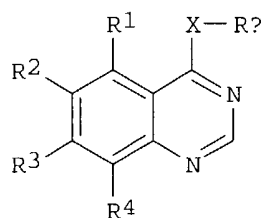
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001021594	A1	20010329	WO 2000-GB3556	20000918
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			GB 1999-22152	A	19990921
			GB 1999-22156	A	19990921
			GB 1999-22159	A	19990921
BR	2000014133	A	20020611	BR 2000-14133	20000918
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
EP	1218356	A1	20020703	EP 2000-962677	20000918
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
JP	2003509497	T2	20030311	JP 2001-524973	20000918
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
EE	200200149	A	20030415	EE 2002-149	20000918
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
AU	763242	B2	20030717	AU 2000-74325	20000918
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
ZA	2002001833	A	20030605	ZA 2002-1833	20020305
				GB 1999-22156	A 19990921
BG	106491	A	20021229	BG 2002-106491	20020307
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918
NO	2002001401	A	20020521	NO 2002-1401	20020320
				GB 1999-22152	A 19990921
				GB 1999-22156	A 19990921
				GB 1999-22159	A 19990921
				WO 2000-GB3556	W 20000918

OS MARPAT 134:252355  
 GI



AB Title compds. (I) [wherein X = O, S, SO, SO<sub>2</sub>, NH, or NR<sub>8</sub>; R<sub>8</sub> = H or alkyl; Ra = (un)substituted 3-quinolinyl or Ph; R<sub>1</sub>-R<sub>4</sub> = independently halo, CN, NO<sub>2</sub>, alkylsulfanyl, N(OH)R<sub>12</sub>, or R<sub>14</sub>X<sub>1</sub>; R<sub>12</sub> = H or alkyl; X<sub>1</sub> = a direct bond, O, CH<sub>2</sub>, OC(O), CO, S, SO, SO<sub>2</sub>, or (un)substituted NHCO, CONH, SO<sub>2</sub>NH, NHSO<sub>2</sub>, or NH; R<sub>14</sub> = H or (un)substituted hydrocarbyl, heterocyclyl, or alkoxy; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, 4-phenoxyaniline•HCl and 4-chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline were refluxed in i-PrOH to yield II (86%). The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration of 0.069 μM. In addition, II gave 50% inhibition of MCF-7 cell proliferation at 2.89 μM and reduced BrdU incorporation into cellular DNA by 50% at 3.68 μM.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:139833 CAPLUS

DN **130:196664**

TI Preparation of 4-phenylaminoquinazolin-6-ylamides and related compounds as tyrosine kinase inhibitors.

IN Wissner, Allan; Tsou, Hwei-ru; Johnson, Bernard Dean; Hamann, Philip Ross; Zhang, Nan

PA American Cyanamid Company, USA

SO PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DT Patent

LA English

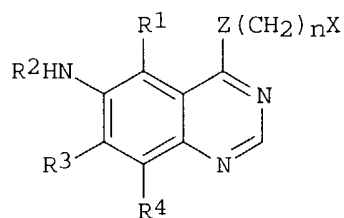
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909016	A1	19990225	WO 1998-US15789	19980729
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			US 1997-904942 A	19970801
TW 436485	B	20010528	TW 1998-87112356	19980728
			US 1997-904942 A	19970801
AU 9886023	A1	19990308	AU 1998-86023	19980729
AU 757418	B2	20030220		
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729
EP 1000039	A1	20000517	EP 1998-937275	19980729
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO			
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729
BR 9811805	A	20000815	BR 1998-11805	19980729
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729
US 6251912	B1	20010626	US 1998-124365	19980729
			US 1997-55072P P	19970801
			US 1997-904942 A	19970801
JP 2001515071	T2	20010918	JP 2000-509699	19980729
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729
ZA 9806905	A	20000131	ZA 1998-6905	19980731
			US 1997-904942 A	19970801
NO 2000000487	A	20000331	NO 2000-487	20000131
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729

OS MARPAT 130:196664  
GI



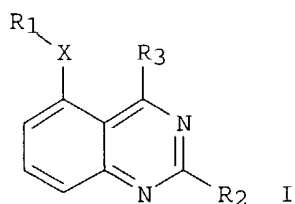
I

AB Title compds. [I; X = (substituted) cycloalkyl, pyridinyl, pyrimidinyl, Ph; Z = NH, O, S, NR; R = alkyl; R<sub>1</sub>, R<sub>3</sub>, R<sub>4</sub> = H, halo, alkyl, alkenyl, alkynyl, alkenyloxy, alkynyloxy, CH<sub>2</sub>OH, halomethyl, alkanoyloxy, alkenoyloxy, alkynoyloxy, alkanoyloxymethyl, etc.; R<sub>2</sub> = R<sub>5</sub>C.tplbond.CCO, (R<sub>5</sub>)<sub>2</sub>C:CR<sub>5</sub>CO, R<sub>5</sub>SS[C(R<sub>5</sub>)<sub>2</sub>]rCO, etc.; n = 0, 1; r = 1-4; R<sub>5</sub> = H, CO<sub>2</sub>H, carboalkoxy, Ph, etc.], were prepared Thus, 4-dimethylamino-2-butynoic acid (preparation given) was stirred with iso-Bu chloroformate and N-methylmorpholine in THF with ice cooling; N-(3-bromophenyl)-4,6-quinazolinediamine in pyridine was added and the mixture was stirred 2 h at 0° to give 4-dimethylamino-2-butynoic acid [4-(3-bromophenylamino)quinazolin-6-yl]amide. The latter inhibited MB435 tumor cell growth with IC<sub>50</sub> = 0.05 µg/mL.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:745041 CAPLUS  
 DN **130:10618**  
 TI Modulating serine/threonine protein kinase function with quinazoline-based  
 compounds and their use as antitumor and anti-fibrotic agents  
 IN Tang, Peng C.; McMahon, Gerald; Weinberger, Heinz; Kutscher, Bernhard;  
 App, Harald  
 PA Sugan, Inc., USA  
 SO PCT Int. Appl., 147 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850370	A1	19981112	WO 1998-US9060	19980501
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
	ZA 9803669	A	19991101	ZA 1998-3669	19980430
				US 1997-45351P P	19970502
	AU 9872829	A1	19981127	AU 1998-72829	19980501
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
				WO 1998-US9060 W	19980501
	EP 981519	A1	20000301	EP 1998-920203	19980501
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
				WO 1998-US9060 W	19980501
	US 6204267	B1	20010320	US 1998-71682	19980501
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
	JP 2001524128	T2	20011127	JP 1998-548336	19980501
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
				WO 1998-US9060 W	19980501
	US 2001014679	A1	20010816	US 2001-769360	20010126
				US 1997-45351P P	19970502
				US 1997-60152P P	19970926
				US 1998-71682	A319980501
OS	CASREACT 130:10618; MARPAT 130:10618				
GI					



AB The present invention is directed in part towards methods of modulating the function of serine/threonine protein kinases with quinazoline-based compds (I). The methods incorporate cells that express a serine/threonine protein kinase, such as RAF. In addition, the invention describes methods of preventing and treating serine/threonine protein kinase-related abnormal conditions (e.g., tumors, fibrotic disorders, or other signal transduction aberrations) in organisms with a compound identified by the invention. Furthermore, the invention pertains to quinazoline compds. and pharmaceutical compns. comprising these compds. Syntheses and biol. activities are provided for 38 quinazoline-based compds.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:612013 CAPLUS

DN **129:221202**

TI Formulations for hydrophobic pharmaceutical agents

IN Shenoy, Narmada; Wagner, Gregory S.

PA Sugen, Inc., USA

SO PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9838984	A2	19980911	WO 1998-US4134	19980304
	WO 9838984	A3	19990128		
	W:		AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG		
				US 1997-39870P P	19970305
				US 1997-41251P P	19970318
	AU 9866806	A1	19980922	AU 1998-66806	19980304
	AU 743024	B2	20020117		
				US 1997-39870P P	19970305
				US 1997-41251P P	19970318
				WO 1998-US4134 W	19980304
	EP 1014953	A2	20000705	EP 1998-908884	19980304
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI		
				US 1997-39870P P	19970305
				US 1997-41251P P	19970318

NZ 337394	A	20010525	WO 1998-US4134 W 19980304
			NZ 1998-337394 19980304
			US 1997-39870P P 19970305
			US 1997-41251P P 19970318
US 6248771	B1	20010619	WO 1998-US4134 W 19980304
			US 1998-34374 19980304
			US 1997-39870P P 19970305
			US 1997-41251P P 19970318
JP 2001514626	T2	20010911	JP 1998-538698 19980304
			US 1997-39870P P 19970305
			US 1997-41251P P 19970318
NZ 510991	A	20021126	WO 1998-US4134 W 19980304
			NZ 1998-510991 19980304
			US 1997-39870P P 19970305
			US 1997-41251P P 19970318
US 2001012844	A1	20010809	US 2001-797842 20010305
US 6696482	B2	20040224	
			US 1997-39870P P 19970305
			US 1997-41251P P 19970318
			US 1998-34374 A319980304

OS MARPAT 129:221202

AB The present invention features formulations, including liquid, semi-solid or solid pharmaceutical formulations, that improve the oral bioavailability of hydrophobic pharmaceutical agents, such as quinazoline-, nitrothiazole-, and indolinone-based compds. Also featured are formulations for parenteral delivery of such hydrophobic pharmaceutical agents, as well as methods of making and using both types of formulations. A claimed formulation comprises the hydrophobic pharmaceutical agents, polyoxyhydrocarbyl compds, and surfactants. A parenteral solution contained 3-[(2,4-dimethylpyrrol-5-yl)methylene]-2-indolinone 5, PEG-400 35, Cremophor EL 25, benzyl alc. 2, ethanol 11.4, and sterile water to 100 % weight/volume

L8 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:282401 CAPLUS

DN **128:321653**

TI Preparation of alkynyl- and azido-substituted 4-anilinoquinazolines for the treatment of hyperproliferative diseases

IN Schnur, Rodney Caughren; Arnold, Lee Daniel

PA Pfizer Inc., USA

SO U.S., 23 pp.

CODEN: USXXAM

DT Patent

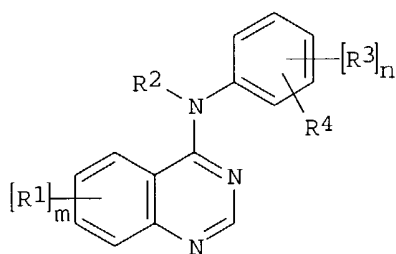
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5747498	A	19980505	US 1996-653786	19960528
				US 1996-653786	19960528

OS CASREACT 128:321653; MARPAT 128:321653

GI



I

AB The title compds. [I; R1 = H, halo, OH, etc.; R2 = H, (un)substituted C1-6 alkyl; R3 = H, halo, OH, etc.; R4 = N3, (un)substituted ethynyl; m = 1-3; n = 1-2] and their salts, useful in the treatment of hyperproliferative diseases such as cancer, were prepared. Thus, reaction of 4-chloro-6,7-dimethoxyquinazoline with 4-azidoaniline hydrochloride in iPrOH afforded 98% I [R1 = 6,7-Me2; R2, R3 = H; R4 = 4-N3]. Compds. I showed IC50 of 0.0001-30  $\mu$ M against EGFR kinase.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:265828 CAPLUS

DN **128:294788**

TI 4-Aminoquinazoline derivatives for treatment of hyperproliferative disorders or conditions in mammals

IN Arnold, Lee Daniel; Sobolov-Jaynes, Susan Beth

PA Pfizer Inc., USA

SO Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 837063	A1	19980422	EP 1997-307724	19971001
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2218945	AA	19980417	US 1996-28881P P	19961017
				CA 1997-2218945	19971015
				US 1996-28881P P	19961017
	JP 10152477	A2	19980609	JP 1997-284872	19971017
	JP 3457164	B2	20031014		
				US 1996-28881P P	19961017
	BR 9705088	A	19990720	BR 1997-5088	19971017
				US 1996-28881P P	19961017

PATENT FAMILY INFORMATION:

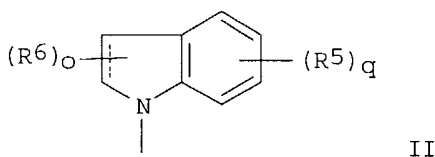
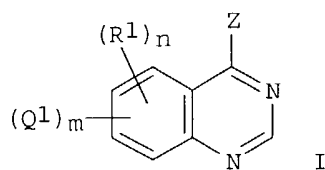
FAN 2001:312415

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6225318	B1	20010501	US 1999-449855	19991126
				US 1996-28881P P	19961017
				US 1997-953078 B2	19971017

OS MARPAT 128:294788

GI





AB The title compds. I [R1 = CF3, halo, OH, etc.; Q1 = ArYX; Ar = monocyclic or bicyclic aryl or heteroaryl ring; X = C2 alkene, C2 alkyne or absent; Y = (CH2)p, wherein one or two of the CH2 groups may be replaced by either O, S, SO2, CO, NH or NMe; Z = NR3R4; R3 = H; R4 = Q2, Ph substituted by R5q, or NR3R4 = II, wherein the dotted line represents an optional double bond; m = 1, 2; n = 0, 1, 2, 3; o = 0, 1, 2; p = 0-5; q = 0-3 integer] and their pharmaceutically acceptable salts are prepared Thus, heating (1H-indol-5-yl)-(6-iodo-7-methoxyquinazolin-4-yl)amine with 4-vinylpyridine, Pd acetate and NEt3 in MeCN gave (1H-indol-5-yl)-[7-methoxy-6-(2-pyridin-4-yl-vinyl)quinazolin-4-yl]amine.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:568104 CAPLUS

DN **127:220671**

TI Preparation of 4-anilino-7-heteroarylquinazolines as tyrosine kinase inhibitors.

IN Barker, Andrew John; Johnstone, Craig

PA Zeneca Limited, UK

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

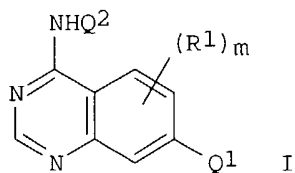
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9730044	A1	19970821	WO 1997-GB345	19970210
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9716127	A1	19970902	GB 1996-3097	A 19960214
			AU 1997-16127	19970210
			GB 1996-3097	A 19960214
			WO 1997-GB345	W 19970210
EP 880517	A1	19981202	EP 1997-902497	19970210
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
			GB 1996-3097	A 19960214
			WO 1997-GB345	W 19970210
JP 2000505441	T2	20000509	JP 1997-529074	19970210
			GB 1996-3097	A 19960214
			WO 1997-GB345	W 19970210
AT 212022	E	20020215	AT 1997-902497	19970210

PT 880517	T	20020731	GB 1996-3097	A	19960214
ES 2171884	T3	20020916	WO 1997-GB345	W	19970210
US 5814630	A	19980929	PT 1997-97902497		19970210
			GB 1996-3097	A	19960214
			ES 1997-902497		19970210
			GB 1996-3097	A	19960214
			US 1997-800830		19970213
			GB 1996-3097	A	19960214

OS MARPAT 127:220671  
GI



AB Title compds. [I; Q1 = (substituted) (benzo-fused) 5-6 membered heteroaryl; m = 1, 2; R1 = H, halo, CF3, OH, amino, NO2, cyano, CO2H, carbamoyl, alkoxy, carbamoyl, alkyl, alkoxy, etc.; Q2 = (substituted) Ph], having antiproliferative activity, were prepared. Thus, 7-bromo-4-(3-chloro-4-fluoroanilino)quinazoline hydrochloride reacted with diisopropyl 5-morpholinomethylthien-3-ylboronate to give 4-(3-chloro-4-fluoroanilino)-7-(5-morpholinomethylthien-3-yl)quinazoline. The latter inhibited EGF-stimulated growth of KB cells with IC50 = 0.12  $\mu$ M.

L8 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:701606 CAPLUS

DN **125:328728**

TI Preparation of N-phenylquinazoline-4-amines as neoplasm inhibitors

IN Schnur, Rodney C.; Arnold, Lee D.

PA Pfizer Inc., USA

SO PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DT Patent

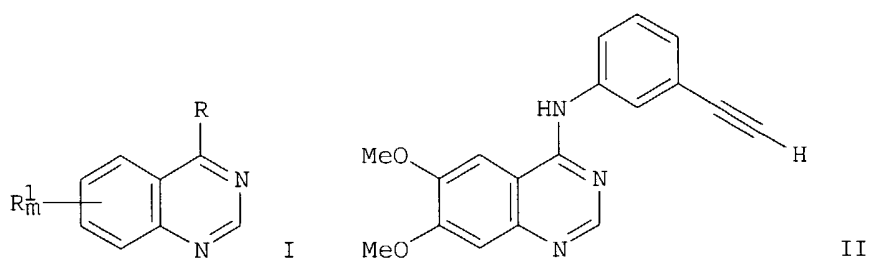
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9630347	A1	19961003	WO 1995-IB436	19950606
	W: CA, FI, JP, MX, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2216796	AA	19961003	US 1995-413300 A2	19950330
	CA 2216796	C	20030902	CA 1995-2216796	19950606
	EP 817775	A1	19980114	US 1995-413300 A	19950330
	EP 817775	B1	20010912	EP 1995-918713	19950606
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
				US 1995-413300 A	19950330
				WO 1995-IB436	W 19950606
	JP 10506633	T2	19980630	JP 1995-529113	19950606
				US 1995-413300 A	19950330
				WO 1995-IB436	W 19950606

JP 3088018	B2	20000918	JP 1996-529113	19950606
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
EP 1110953	A1	20010627	EP 2001-104696	19950606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE			US 1995-413300	A 19950330
			EP 1995-918713	A319950606
AT 205483	E	20010915	AT 1995-918713	19950606
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
ES 2161290	T3	20011201	ES 1995-918713	19950606
			US 1995-413300	A 19950330
PT 817775	T	20020130	PT 1995-95918713	19950606
			US 1995-413300	A 19950330
SK 283763	B6	20040108	SK 2003-56	19950606
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
SK 283762	B6	20040108	SK 1996-387	19950606
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
TW 454000	B	20010911	TW 1996-85102699	19960305
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
CN 1137037	A	19961204	CN 1996-102992	19960328
CN 1066142	B	20010523		
			US 1995-413300	A 19950330
			WO 1995-IB436	A 19950606
PL 186843	B1	20040331	PL 1996-313541	19960328
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
NO 9601299	A	19961001	NO 1996-1299	19960329
			US 1995-413300	A 19950330
			WO 1995-IB436	A 19950606
AU 9650406	A1	19961010	AU 1996-50406	19960329
AU 703638	B2	19990325		
			US 1995-413300	A 19950330
			WO 1995-IB436	A 19950606
ZA 9602522	A	19970929	ZA 1996-2522	19960329
			US 1995-413300	A 19950330
BR 9601200	A	19980106	BR 1996-1200	19960329
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
RU 2174977	C2	20011020	RU 1996-106055	19960329
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
HR 960147	B1	20020430	HR 1996-960147	19960329
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
FI 9703832	A	19970929	FI 1997-3832	19970929
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606
AU 9935854	A1	19990819	AU 1999-35854	19990623
			US 1995-413300	A 19950330
			WO 1995-IB436	A 19950606
			AU 1996-50406	A319960329
GR 3037070	T3	20020131	GR 2001-401942	20011030
			US 1995-413300	A 19950330
			WO 1995-IB436	W 19950606

OS MARPAT 125:328728  
GI



AB Title compds. [I; r = NR<sub>2</sub>ZR<sub>4</sub>; R<sub>1</sub> = H, halo, NH<sub>2</sub>, CO<sub>2</sub>H, etc.; R<sub>2</sub> = H (un)substituted alkyl; R<sub>4</sub> = N<sub>3</sub>, C.tplbond.CR<sub>3</sub>; R<sub>3</sub> = H, (un)substituted alkyl; Z = (un)substituted phenylene; m = 1-3] were prepared. Thus, 4-chloro-6,7-dimethoxyquinazoline was aminated by 3-(HC.tplbond.C)C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> to give title compound II. I had IC<sub>50</sub> of 10<sup>-4</sup> to 30 μM against phosphorylation on Lys3-gastrin tyrosine by epidermal growth factor receptor kinase in vitro.

L8 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:605384 CAPLUS

DN **121:205384**

TI Heterocycles substituted with biphenyl-3-cyclobutene-1,2-dione derivatives as antagonists of angiotensin II receptors

IN Soll, Richard M.; Kinney, William A.

PA American Home Products Corp., USA

SO U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 782,029, abandoned.

CODEN: USXXAM

DT Patent

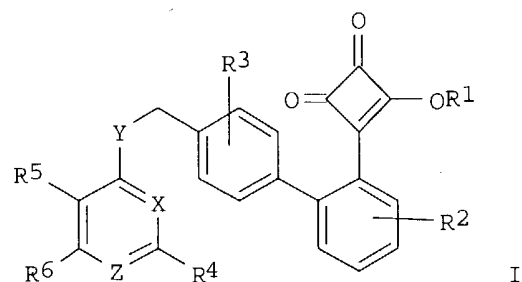
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5330989	A	19940719	US 1992-943614	19920911
				US 1991-782029	19911024

OS MARPAT 121:205384

GI



AB The title compds.[I; R1 = H, alkyl, benzyl, alkoxyalkyl, Ph; R2 = H, (un)substituted alkyl, alkoxyalkyl, Ph, alkoxy, F, Cl, Br, I, (un)substituted NH2, etc.; R3 = H, (un)substituted alkyl, benzyl, alkoxyalkyl, Ph, alkoxy, F, Cl, Br, I, etc.; R4 = H, (un)substituted NH2, OR1, CN, F, Cl, I, Br, perfluoroalkyl, alkyl, Ph, alkoxy, alkoxyalkyl, (CH2)nCO2R1, (un)substituted (CH2)nCONH2; n = 1-5; R5, R6 = H, alkyl, benzyl, alkoxyalkyl, Ph, F, Cl, (un)substituted NH2; R5R6 = a C linking chain of ≤6 linking members; Y = O, (un)substituted NH, etc.; X = N, (un)substituted CH; Z = N, (un)substituted CH], which are angiotensin II antagonists, useful as antihypertensives, etc., are prepared Thus, 3-hydroxy-4-[4'-[[[5,6,7,8-tetrahydro-2-(trifluoromethyl)-4-quinazolinyl]amino]methyl][1,1'-biphenyl]-2-yl]-3-cyclobutene-1,2-dione, m.p. 193° (decomposition), which was prepared in 5 steps from 2-(4'-aminomethylphenyl)nitrobenzene, demonstrated IC50 against 125I-angiotensin II using rat-derived angiotensin II receptors of 25nM.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

47.39

546.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-11.09

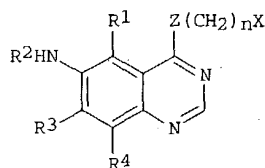
-19.41

STN INTERNATIONAL LOGOFF AT 15:29:02 ON 16 APR 2004

L8 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:139833 CAPLUS  
 DN 130:196664  
 TI Preparation of 4-phenylaminoquinazolin-6-ylamides and related compounds as  
 tyrosine kinase inhibitors.  
 IN Wissner, Allan; Tsou, Hwei-ru; Johnson, Bernard Dean; Hamann, Philip Ross;  
 Zhang, Nan  
 PA American Cyanamid Company, USA  
 SO PCT Int. Appl., 121 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9909016	A1	19990225	WO 1998-US15789	19980729
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
TW 436485	B	20010528	US 1997-904942 A	19970801
AU 9886023	A1	19990308	WO 1998-US15789W	19980729
AU 757418	B2	20030220	US 1997-904942 A	19970801
EP 1000039	A1	20000517	WO 1998-US15789W	19980729
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO			EP 1998-937275	19980729
BR 9811805	A	20000815	US 1997-904942 A	19970801
US 6251912	B1	20010626	WO 1998-US15789W	19980729
JP 2001515071	T2	20010918	BR 1998-11805	19980729
ZA 9806905	A	20000131	US 1997-904942 A	19970801
NO 2000000487	A	20000331	WO 1998-US15789W	19980729
			US 1997-904942 A	19970801
			US 1997-55072P P	19970801
			US 1997-904942 A	19970801
			JP 2000-509699	19980729
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729
			ZA 1998-6905	19980731
			US 1997-904942 A	19970801
			NO 2000-487	20000131
			US 1997-904942 A	19970801
			WO 1998-US15789W	19980729

OS MARPAT 130:196664  
 GI



AB Title compds. [I; X = (substituted) cycloalkyl, pyridinyl, pyrimidinyl, Ph; Z = NH, O, S, NR; R = alkyl; R1, R3, R4 = H, halo, alkyl, alkenyl, alkynyl, alkenyloxy, alkynyloxy, CH2OH, halomethyl, alkanoyloxy, alkenoyloxy, alkynoyloxy, alkanoyloxymethyl, etc.; R2 = R5C.tplbond.CCO, (R5)2C:CR5CO, R5SS[C(R5)2]rCO, etc.; n = 0, 1; r = 1-4; R5 = H, CO2H, carboalkoxy, Ph, etc.], were prepared. Thus, 4-dimethylamino-2-butynoic acid (preparation given) was stirred with iso-Bu chloroformate and N-methylmorpholine in THF with ice cooling; N-(3-bromophenyl)-4,6-quinazolin-6-ylamine in pyridine was added and the mixture was stirred 2 h at 0° to give 4-dimethylamino-2-butynoic acid [4-(3-bromophenylamino)quinazolin-6-yl]amide. The latter inhibited MB435 tumor cell growth with IC50 = 0.05 µg/mL.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

Patel

<4/16/2004>